Air Quality
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

DRAFT

Mr. Gregory G. Bean
Directorate of Public Works
(IMBG-PW/Ms. Stump)
2175 Reilly Road, Stop A
Fort Bragg, North Carolina 28310-5000

Dear Mr. Bean:

SUBJECT: Air Quality Permit No. 04379T42
Facility ID: 2600102
XVIII Airborne Corps and Fort Bragg
Fort Bragg, North Carolina
Cumberland County
Fee Class: Title V
PSD Class: Major

In accordance with your completed Air Quality Permit Application for a significant modification of a Title V permit under 15A NCAC 2Q .0516, received November 3, 2015, we are forwarding herewith Air Quality Permit No. 04379T42 to the Department of the Army, XVIII Airborne Corps and Fort Bragg, located at 2175 Reilly Road, Stop A Fort Bragg, North Carolina authorizing the construction and operation, of the emission sources and associated air pollution control devices specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the conditions of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

The PSD minor baseline dates for PM10, SO_2 and NOx have been triggered for Cumberland County. For PSD increment tracking purposes, PM10 emissions from this modification are increased by less than pound per hour, sulfur dioxide emissions from this modification are increased by less than 1 pound per hour, and nitrogen dioxide emissions from this modification are increased by 2.8 pounds per hour.

This Air Quality Permit shall be effective from DRAFT until September 30, 2016, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Kevin Godwin at (919) 707-8480.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDENR

Enclosure

c: Heather Ceron, EPA Region 4
Steven Vozzo, Supervisor, Fayetteville Regional Office
Central Files
Connie Horne (cover letter only)

Changes to existing permit per application 2600102.15A:

The following table provides a summary of changes made with this permit revision 04379T42.

Page No.	Section	Description of Change
Cover letter	N/A	Amended application type; permit revision numbers, and dates.
Attachment	Insignificant Activities	Included nineteen (19) new and existing natural gas-fired sources that meet the definition of hot water heater under 40 CFR 63 DDDDD. Included welding shop (ID No. IES-22W) and soldering training shop (ID No. IES-23W). Moved brass deformer (ID No. ES-107BDI) from permit to insignificant activity list. Included natural gas-fired boilers (ID Nos. IES-911B, 912B, and 913B) subject to MACT Subpart DDDDD.
1	Permit cover page	Amended permit revision numbers and all dates.
N/A	All, Header	Updated permit revision number.
Global	Global	Updated testing, monitoring, recordkeeping, and reporting regulatory citation to 15A NCAC 02Q .0508(f).
3, 69, and 71	Table of Emission Sources, 2.2 G.3. and 2.2 G.4.	Included new sources associated with this application (ID Nos. ES-908B, ES-909B, ES-910B, ES-196GI, ES-197GI, and ES-198GI. Removed eighteen (18) small boilers, ten (10) emergency generators, one air stripper, and one welding shop.
Global	Global	Made administrative changes as outlined in the application to source ID Nos. ES-87GI, ES-38B, ES-39B, ES-01C, ES-02C, ES-08C, ES-09C, and ES12C. Included standard I & M, Recordkeeping, and Reporting requirements for control equipment.
32	2.1 I.	Included natural gas-fired boilers (ID Nos. ES-908B, 909B, and 910B) in existing conditions for 15A NCAC 02D .0503, .0516, and .0521. Removed monitoring and recordkeeping requirements.
39	2.1 L.	Included new emergency generators (ID Nos. ES-196GI, ES-197GI, and ES-198GI.
79	2.2 M.	Included new boilers (ID No. ES-908B, ES-909B, and ES-910B).
3, 79	Table of Emission Sources, 2.2 M.	Moved 122 propane, natural gas, No. 2 fuel oil fired sources to insignificant activity list under source (ID No. IES-00B) as they are categorically exempt from 40 CFR 63 DDDDD and emissions are below significance levels listed in 15A NCAC 02Q .0503(8).
79	2.2 M	Moved sources meeting the definition of hot water heater (which include hot water boilers) per 40 CFR 63 DDDDD (ID Nos. ES-00BI, ES-649B, ES-762B, ES-822B, ES-823B, ES-824B, ES-00BI69, ES-BI70, ES-00BI71, ES-00BI72, and ES-00BI73) from permit to insignificant activity list under ID No. IES-00B.
83	3 - General Conditions	Included General Conditions from most recent shell version (v4).

ATTACHMENT to Permit No. 04379T42

Insignificant Activities per 15A NCAC 2Q .0503(8),

Emission Source ID	Emission Source Description	Source of TAPs?	Source of Title V Pollutants ?
IES-04WO	Woodworking Operation, 2-2405	No	Yes
IES-06WO	Woodworking Operation, located at building 251	No	Yes
IES-01AB	Abrasive Blasting, SAAF, located at building P-3354	Yes	Yes
IES-04PD5	Paint gun cleaners at MMD and SAAF	Yes	Yes
IES-01SD	Sanding Shop Operation	Yes	Yes
IES-JSOC	One woodworking operation controlled by one cyclone	No	Yes
IES-04AB	One abrasive blast booth with media recovery and recycling system controlled by fabric filter (1292 square feet of surface area, CD-04AB)	Yes	Yes
IES-05I	One natural gas-fired, multiple chamber, pet incinerator, 350 pounds per hour maximum charge rate, 1.4 million Btu per hour heat input primary chamber, and 1.0 million Btu per hour heat input secondary chamber	Yes	Yes
IES-04I	One natural gas-fired pet incinerator {250 pounds per hour maximum charge rate, multiple chamber, with 1.0 million Btu per hour (minimum) primary burner and a 600,000 Btu per hour (minimum) secondary burner}, located at Building 5-3743,	Yes	Yes
IES-03E	One helicopter small engine test stand located at Simmons AAF	Yes	Yes
IES-04E	One helicopter large engine test stand located at Simmons AAF	Yes	Yes
IES-09C	Direct natural gas-fired make-up air heater (3.3 million Btu per hour total heat input capacity) located in the Materiel Maintenance Building (Y-4804)	Yes	Yes
IES-02T241	500 gallon HFRAST Diesel	Yes	Yes
IES-02T183B	1,000 gallon HFRAST Diesel	Yes	Yes
IES-02T254C	1,000 gallon HFRAST Diesel	Yes	Yes
IES-02T254D	1,000 gallon HFRAST Diesel	Yes	Yes
IES-02T390B	250 gallon HFRAST Diesel	Yes	Yes
IES-02TG137	500 gallon HFRAST Diesel	Yes	Yes
IES-02TG155	1,000 gallon HFRAST Diesel	Yes	Yes
IES-02TG250	200 gallon HFRAST Diesel	Yes	Yes
IES-02TG252	3,000 gallon HFRAST Diesel	Yes	Yes
IES-02TG260	1,000 gallon HFRAST Diesel	Yes	Yes
IES-02TG346	3,000 gallon HFRAST Diesel	Yes	Yes
IES-02TG707	1,500 gallon HFRAST Diesel	Yes	Yes
IES-02TG713	100 gallon HFRAST Diesel	Yes	Yes
IES-02TG764	303 gallon HFRAST Diesel	Yes	Yes
IES-02TG805	1,000 gallon HFRAST Diesel	Yes	Yes
IES-02TG9	300 gallon HFRAST Diesel	Yes	Yes
IES-02TG991	303 gallon HFRAST Diesel	Yes	Yes
IES-03T183A	1,000 gallon HFRAST Gasoline	Yes	Yes
IES-03T390A	500 gallon HFRAST Gasoline	Yes	Yes
IES-05T162A	1,000 gallon HFRAST JP-8	Yes	Yes
IES-05T610C	6,000 gallon HFRAST JP-8	Yes	Yes
IES-05TAVF	4,000 gallon HFRAST JP-8	Yes	Yes
IES-05TG159	200 gallon HFRAST JP-8	Yes	Yes
IES-05TSAN	8,000 gallon HFRAST JP-8	Yes	Yes
IES-20T610B	6,000 gallon HFRAST Motor Oil	Yes	Yes
IES-03T558A	2,000 gallon E-85 storage tank	Yes	Yes
IES-03T558B	1,000 gallon E-85 storage tank	Yes	Yes
IES-03T625	1,000 gallon gasoline storage tank	Yes	Yes
IES-21T610A	6,000 gallon on HFRAST Synthetic Oil	Yes	Yes

Emission Source ID	Emission Source Description	Source of TAPs?	Source of Title V Pollutants ?
IES-11T756E	20,000 HFRUST Diesel	Yes	Yes
IES-11T756EF	20,000 HFRUST Gasoline	Yes	Yes
IES-11T759B	6,000 HFRUST Gasoline	Yes	Yes
IES-12T759A	10,000 gallon HFRUST JP-8	Yes	Yes
IES-16T12824	420,000 gallon VFRAST JP-8	Yes	Yes
IES-16T12825	420,000 gallon, AST (vertical), JP-8, Bldg. 813	Yes	Yes
IES-16T41102	840,000 gallon VFRAST JP-8	Yes	Yes
IES-16T41104	840,000 gallon VFRAST JP-8	Yes	Yes
IES-16T41113	442,819 gallon VFRAST JP-8	Yes	Yes
IES-16T41114	2,310,000 gallon VFRAST JP-8	Yes	Yes
IES-01UST	UST, gasoline, Building 3-2742	Yes	Yes
IES-02UST	UST, gasoline, Building 0-9087	Yes	Yes
IES-03UST	UST, gasoline, Building A-1913	Yes	Yes
IES-04UST	UST, gasoline, Building Y-3223	Yes	Yes
IES-06PD5	Brake Cleaners	Yes	Yes
IES-07PD6	Jet Washers	Yes	Yes
IES-01L	Longstreet Landfill	Yes	Yes
IES-02L	Landfill 9	Yes	Yes
IES-03L	Landfill 14	Yes	Yes
IES-02CM	Composting Operation	Yes	Yes
IES-02N	Non-Destructive inspection, P3354	Yes	Yes
IES-04N	Non-Destructive inspection, Bldg. 712	Yes	Yes
IES-05N	Non-Destructive inspection, Bldg. 731	Yes	Yes
IES-01T	HFRAST, #2 Fuel oil	Yes	Yes
IES-02T	HFRAST, Diesel	Yes	Yes
IES-03T	HFRAST, Gasoline	Yes	Yes
IES-04T	HFRAST, JP-4	Yes	Yes
IES-05T	HFRAST, JP-8	Yes	Yes
IES-06T	HFRUST, Off Spec. fuel	Yes	Yes
IES-07T	HFRUST, Used fuel	Yes	Yes
IES-08T	HFRUST, Used JP-8	Yes	Yes
IES-09T	HFRUST, #2 Fuel oil	Yes	Yes
IES-10T	HFRUST, Diesel	Yes	Yes
IES-11T	HFRUST, Gasoline	Yes	Yes
IES-12T	HFRUST, JP-8	Yes	Yes
IES-13T	HFRUST, Kerosene	Yes	Yes
IES-14T	VFRAST, #2 Fuel oil	Yes	Yes
IES-15T	VFRAST, Diesel	Yes	Yes
IES-16T	VFRAST, JP-8	Yes	Yes
IES-17T	VFRAST, Used fuel	Yes	Yes
IES-18T	No. 2 fuel oil storage tank (20,000 gallon capacity)	Yes	Yes
IES-19T	No. 2 fuel oil storage tank (20,000 gallon capacity)	Yes	Yes
IES-VFRAST	Off Spec. fuel	Yes	Yes
IES-01FP	Fueling Point with 5,000 gallon JP-8 Horizontal AST and 2,000 gallon Gasoline Horizontal AST	Yes	Yes
IES-05E	Outboard Engine Test Stand, E-2576	Yes	Yes
IES-07E	Outboard Engine Test Stand, 0-1900	Yes	Yes
IES-01W	Welding, 2-1645	Yes	Yes
IES-02W	Welding, Building 251	Yes	Yes
IES-03W	Welding, 5-5211	Yes	Yes
IES-04W	Welding, A-2515	Yes	Yes
IES-05W	Welding, A-4505	Yes	Yes
IES-06W	Welding, C-8728	Yes	Yes

Emission Source ID	Emission Source Description	Source of TAPs?	Source of Title V Pollutants ?
IES-09W	Welding, P-3354	Yes	Yes
IES-10W	Welding, O-1900	Yes	Yes
IES-12W	Welding, Y-5015	Yes	Yes
IES-13W	Welding Shop, building 558	Yes	Yes
IES-15W	Welding Shop, building A2206	Yes	Yes
IES-16W	Welding Shop, building A2905	Yes	Yes
IES-17W	Welding Shop, building A3804	Yes	Yes
IES-18W	Welding Shop, building A4326	Yes	Yes
IES-19W	Welding Shop, building A4333	Yes	Yes
IES-20W	Welding Shop, building A4521	Yes	Yes
IES-21W	Welding Shop, building M8139	Yes	Yes
IES-22W	Welding shop, building D-2340	Yes	Yes
IES-23W	Soldering shop, Yarborough Complex	Yes	Yes
IES-10PD558	Degreasing Operation (43 Trans.) building 558	Yes	Yes
IES-10PD712A	Degreasing Operation (Wheel and Tire) building 712 (1 of 2)	Yes	Yes
IES-10PD712B	Degreasing Operation (Wheel and Tire) building 712 (2 of 2)	Yes	Yes
IES-10PD715	Degreasing Operation (43 MXS) building 715	Yes	Yes
IES-10PD723	Degreasing Operation (AGE Maintenance) building 723	Yes	Yes
IES-10PD768	Degreasing Operation (AGE Maintenance) building 768	Yes	Yes
IES-10PD5005	Degreasing Operation (23 Trans.) building 5005	Yes	Yes
IES-40B	Natural gas-fired boiler (7.3 mmBtu/hr heat input), H-3838	Yes	Yes
IES-41B	Natural gas-fired boiler (7.3 mmBtu/hr heat input), H-3838	Yes	Yes
IES-HFRAST	Off Spec. gasoline storage tanks	Yes	Yes
IES-01SDU	Solvent Distillation Unit	Yes	Yes
IES-11C	Painting Room, H-1951	Yes	Yes
IES-12C	Paint bench at the MacRidge Triangle Compound	Yes	Yes
IES-Dustcell	One dust collection system, Building P-3053	Yes	Yes
IES-01CM	Composting Operation	Yes	Yes
IES-02X	X-ray operation	Yes	Yes
IES-10H	Direct natural gas-fired make-up air heater (3.3 mmBtu/hr heat input)	Yes	Yes
IES-911B	Natural gas-fired boiler (2.5 million Btu per hour heat input) MACT DDDDD	Yes	Yes
IES-912B	Natural gas-fired boiler (2.0 million Btu per hour heat input) MACT DDDDD	Yes	Yes
IES-913B	Natural gas-fired boiler (2.0 million Btu per hour heat input) MACT DDDDD	Yes	Yes
IES-00B	Natural gas-fired hot water heaters (< 1.6 million Btu per hour heat input) No. 2 fuel oil-fired hot water heaters (< 1.6 million Btu per hour heat input) Propane-fired hot water heaters (< 1.6 million Btu per hour heat input)	Yes	Yes
IES-107BDI	Brass deformer (83 horsepower)	Yes	Yes

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2D .1100 “Control of Toxic Air Pollutants” or 2Q .0711 “Emission Rates Requiring a Permit”.
3. For additional information regarding the applicability of GACT see the DAQ page titled “The Regulatory Guide for Insignificant Activities/Permits Exempt Activities”. The link to this site is as follows: http://daq.state.nc.us/permits/insig/

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
04379T42	04379T41	DRAFT	September 30, 2016

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Department of The Army, Headquarters XVIII Airborne Corps and Fort Bragg**

Facility ID: 2600102

Facility Site Location: 2175 Reilly Road, Stop A
City, County, State, Zip: Fort Bragg, Cumberland County, North Carolina, 28310-5000

Mailing Address: (IMBG-PW/Mr. Bean), 2175 Reilly Road, Stop A
City, State, Zip: Fort Bragg, North Carolina, 28310-5000

Application Number: 2600102.15A
Complete Application Date: November 3, 2015

Primary SIC Code: 9711
Division of Air Quality, Regional Office Address: Fayetteville Regional Office
225 Green Street, Suite 714
Fayetteville, North Carolina 28301

Permit issued this the th day of , 2016

_____

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table Of Contents

SECTION 1- PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

Table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Boilers				
3, 14, 79	ES-01CMA - NSPS ES-02CMA - NSPS ES-03CMA - NSPS 2D .1109 Case-By-Case MACT	Three No. 2 fuel oil/natural gas-fired boilers with low NOx burners and flue gas recirculation (41 million Btu per hour heat input each when firing fuel oil and 42 million Btu per hour heat input each when firing natural gas)	None	None
3, 17, 79	ES-11B ES-12B 2D .1109 Case-By-Case MACT	Two natural gas/No. 2 fuel oil-fired boilers (25 million Btu per hour heat input capacity each), located in Building N-6002 (COSCOM),	None	None
3, 19, 79	ES-24B - NSPS ES-25B - NSPS ES-26B - NSPS 2D .1109 Case-By-Case MACT	Three natural gas/No. 2 fuel oil-fired boilers (two at 23.4 million Btu per hour heat input capacity each and one at 10 million Btu per hour heat input capacity, respectively) located in the new Womack Hospital Boiler Plant, Building 4-2811	None	None
3, 21, 79	ES-27B ES-28B 2D .1109 Case-By-Case MACT	Two natural gas-fired boilers (20 million Btu per hour heat input capacity each), located in Building E-2823	None	None
3, 22, 79	ES-29B - NSPS 2D .1109 Case-By-Case MACT	One natural gas/No. 2 fuel oil-fired boiler (72.3 million Btu per hour heat input capacity), located in Building C-2337 (82nd Div.)	None	None
3, 25, 79	ES-30B ES-31B ES-32B 2D .1109 Case-By-Case MACT	Three natural gas/No. 2 fuel oil-fired boilers (8.3 million Btu per hour heat input capacity each), located in the Special Operations Training Facility (SOTF) area,	None	None
3, 27, 79	ES-35B – NSPS 2D .1109 Case-By-Case MACT	One natural gas/No. 2 fuel oil-fired "temporary backup" boiler (up to 72.3 million Btu per hour heat input)	None	None
3, 29, 79	ES-36B - NSPS ES-37B - NSPS 2D .1109 Case-By-Case MACT	Two natural gas/No. 2 fuel oil-fired boilers (10.5 million Btu per hour heat input each)	None	None
3, 29, 79	ES-38B – NSPS ES-39B – NSPS 2D .1109 Case-By-Case MACT	Two natural gas-fired boilers (9.64 million Btu per hour heat input each)	None	None
3, 32, 79	ES-40B ES-41B ES-42B ES-43B 2D .1109 Case-By-Case MACT	Four natural gas/No. 2 fuel oil-fired boilers (8.4 million Btu per hour heat input each) located in buildings A4251 and A2547	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
4, 36, 79	ES-44B - NSPS ES-45B - NSPS ES-46B - NSPS 2D .1109 Case-By-Case MACT	Three No. 2 fuel oil/natural gas-fired boilers with low NOx burners (45.42 million Btu per hour heat input capacity), located in the 82nd Heat Plant	None	None
4, 34, 79	ES-TEMPBOIL NSPS, Subpart Dc 2D .1109 Case-By-Case MACT	Natural gas/No. 2 fuel oil-fired, temporary boiler (up to 100 million Btu per hour heat input)	None	None
4, 79	ES-FORSCOM1 PSD Avoidance, 2D .1109 Case-By-Case MACT	Natural gas/No. 2 fuel oil-fired, boiler (3.0 million Btu per hour heat input)	None	None
4, 79	ES-FORSCOM2 PSD Avoidance, 2D .1109 Case-By-Case MACT	Natural gas/No. 2 fuel oil-fired, boiler (3.0 million Btu per hour heat input)	None	None
4, 79	ES-FORSCOM3 PSD Avoidance, 2D .1109 Case-By-Case MACT	Natural gas/No. 2 fuel oil-fired, boiler (3.0 million Btu per hour heat input)	None	None
4, 80	ES-601B MACT DDDDD	Natural gas-fired boiler (2.0 million Btu per hour heat input)	None	None
4, 80	ES-602B MACT DDDDD	Natural gas-fired boiler (2.0 million Btu per hour heat input)	None	None
4, 80	ES-650B 2D .1109 Case-By-Case MACT	Natural gas/No. 2 fuel oil-fired boiler (2.09 million Btu per hour heat input)	None	None
4, 80	ES-779B MACT DDDDD	Natural gas/No. 2 fuel oil-fired boiler (2.0 million Btu per hour heat input)	None	None
4, 80	ES-814B MACT DDDDD	Natural gas/No. 2 fuel oil-fired boiler (1.8 million Btu per hour heat input)	None	None
4, 80	ES-819B MACT DDDDD	Natural gas/No. fuel oil-fired boiler (2.0 million Btu per hour heat input)	None	None
4, 80	ES-820B MACT DDDDD	Natural gas/No. 2 fuel oil-fired boiler (2.0 million Btu per hour heat input)	None	None
4, 80	ES-825B 2D .1109 Case-By-Case MACT	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)	None	None
4, 80	ES-833B MACT DDDDD	Natural gas-fired boiler (1.8 million Btu per hour heat input)	None	None
4, 80	ES-834B MACT DDDDD	Natural gas-fired boiler (1.8 million Btu per hour heat input)	None	None
4, 80	ES-835B MACT DDDDD	Natural gas-fired boiler (1.8 million Btu per hour heat input)	None	None
4, 80	ES-842B MACT DDDDD	Natural gas-fired boiler (2.34 million Btu per hour heat input)	None	None
4, 80	ES-851B MACT DDDDD	Natural gas-fired boiler (3.13 million Btu per hour heat input)	None	None
4, 80	ES-873B MACT DDDDD	Natural gas-fired boiler (2.0 million Btu per hour heat input)	None	None
4, 80	ES-874B MACT DDDDD	Natural gas-fired boiler (2.0 million Btu per hour heat input)	None	None
5, 80	ES-886B MACT DDDDD	Natural gas-fired boiler (1.8 million Btu per hour heat input)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
5, 80	ES-887B MACT DDDDD	Natural gas-fired boiler (1.8 million Btu per hour heat input)	None	None
5, 80	ES-890B MACT DDDDD	Natural gas-fired boiler (2.01 million Btu per hour heat input)	None	None
5, 80	ES-892B MACT DDDDD	Natural gas-fired boiler (1.8 million Btu per hour heat input)	None	None
5, 80	ES-894B MACT DDDDD	Natural gas-fired boiler (1.66 million Btu per hour heat input)	None	None
5, 80	ES-895B MACT DDDDD	Natural gas-fired boiler (1.66 million Btu per hour heat input)	None	None
5, 80	ES-902B MACT DDDDD	Natural gas-fired boiler (2.0 million Btu per hour heat input)	None	None
5, 80	ES-903B MACT DDDDD	Natural gas-fired boiler (2.0 million Btu per hour heat input)	None	None
5, 80	ES-906B MACT DDDDD	Natural gas-fired boiler (4.003 million Btu per hour heat input)	None	None
5, 80	ES-907B MACT DDDDD	Natural gas-fired boiler (2.0 million Btu per hour heat input)	None	None
5, 80	ES-908B MACT DDDDD	Natural gas-fired boiler (4.2 million Btu per hour heat input	None	None
5, 80	ES-909B MACT DDDDD	Natural gas-fired boiler (3.2 million Btu per hour heat input)	None	None
5, 80	ES-910B MACT DDDDD	Natural gas-fired boiler (2.7 million Btu per hour heat input)	None	None
Generators				
5, 39, 64	ES-01PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (230 kW) maximum output	None	None
5, 39, 64	ES-02PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (250 kW maximum output)	None	None
5, 39, 64	ES-03PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (350 kW maximum output)	None	None
5, 39, 64	ES-04PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (500 kW maximum output)	None	None
5, 39, 64	ES-05PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (350 kW maximum output)	None	None
5, 39, 64	ES-06PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (350 kW maximum output)	None	None
5, 39, 64	ES-07PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (400 kW maximum output)	None	None
5, 39, 64	ES-08PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (400 kW maximum output)	None	None
5, 39, 64	ES-10PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (600 kW maximum output)	None	None
5, 39, 64	ES-16PSG MACT Subpart ZZZZ	Diesel-fired emergency generator (900 kW maximum output)	None	None
5, 39, 64	ES-17PSG MACT Subpart ZZZZ	Diesel-fired peak shaving and emergency generator (2700 kW maximum output)	None	None
5, 39, 64	ES-24G MACT Subpart ZZZZ	Diesel-fired emergency generator (1275 kW maximum output)	None	None
5, 39, 64	ES-25G MACT Subpart ZZZZ	Diesel-fired emergency generator (1275 kW maximum output)	None	None
6, 39, 64	ES-26G MACT Subpart ZZZZ	Diesel-fired emergency generator (1275 kW maximum output)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
6, 39, 64	ES-33G MACT Subpart ZZZZ	Diesel-fired emergency generator (1750 kW maximum output)	None	None
6, 39, 64	ES-37G MACT Subpart ZZZZ	Diesel-fired emergency generator (1250 kW maximum output)	None	None
6, 39, 64	ES-38G MACT Subpart ZZZZ	Diesel-fired emergency generator (600 kW maximum output)	None	None
6, 39, 64, 76	ES-41G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1000 kW maximum output)	None	None
6, 39, 64, 76	ES-42G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1000 kW maximum output)	None	None
6, 39, 64, 76	ES-43G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (750 kW maximum output)	None	None
6, 39, 64, 76	ES-44G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (500 kW maximum output)	None	None
6, 39, 64, 76	ES-45G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (350 kW maximum output)	None	None
6, 39, 64, 76	ES-46G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (455 kW maximum output)	None	None
6, 39, 64, 76	ES-TEMPGEN1500A MACT Subpart ZZZZ NSPS Subpart IIII	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 1500 kW maximum output)	None	None
6, 39, 64, 76	ES-TEMPGEN1500B MACT Subpart ZZZZ NSPS Subpart IIII	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 1500 kW maximum output)	None	None
6, 39, 64, 76	ES-TEMPGEN900A MACT Subpart ZZZZ NSPS Subpart IIII	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 900 kW maximum output)	None	None
6, 39, 64, 76	ES-TEMPGEN900B MACT Subpart ZZZZ NSPS Subpart IIII	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 900 kW maximum output)	None	None
6, 39, 64, 76	ES-73G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (300 kW maximum output)	None	None
6, 39, 64	ES-74G MACT Subpart ZZZZ	Diesel-fired emergency generator (150 kW maximum output)	None	None
6, 39, 64, 76	ES-75G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (175 kW maximum output)	None	None
6, 39, 64, 76	ES-80G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (3100 kW maximum output, 4154 Hp)	None	None
6, 39, 64, 76	ES-81G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (3100 kW maximum output, 4154 Hp)	None	None
6, 39, 64, 76	ES-82G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (3100 kW maximum output, 4154 Hp)	None	None
7, 39, 64, 76	ES-83G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (2500 kW maximum output, 3350 Hp)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7, 39, 64, 76	ES-84G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (800 kW maximum output, 1073 Hp)	None	None
7, 39, 64, 76	ES-85G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (150 kW maximum output, 201 Hp)	None	None
7, 39, 64, 76	ES-86G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (800 kW maximum output, 1073 Hp)	None	None
7, 39, 64, 76	ES-87G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (900 kW maximum output)	None	None
7, 39, 64, 76	ES-88G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (750 kW maximum output)	None	None
7, 39, 64, 76	ES-89G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (2000 kW maximum output)	None	None
7, 39, 64, 76	ES-90G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (2000 kW maximum output)	None	None
7, 39, 64, 76	ES-91G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (2000 kW maximum output)	None	None
7, 39, 64, 76	ES-92G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (2000 kW maximum output)	None	None
7, 39, 64, 76	ES-93G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (2000 kW maximum output)	None	None
7, 39, 64, 76	ES-94G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (2000 kW maximum output)	None	None
7, 39, 64, 76	ES-95G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1230 kW maximum output)	None	None
7, 39, 64, 76	ES-96G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1230 kW maximum output)	None	None
7, 39, 64, 76	ES-97G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1230 kW maximum output)	None	None
7, 39, 64, 76	ES-98G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1000 kW maximum output)	None	None
7, 39, 64, 76	ES-99G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1250 kW maximum output)	None	None
7, 39, 64, 76	ES-100G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (750 kW maximum output)	None	None
7, 39, 64, 76	ES-101G MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1230 kW maximum output)	None	None
7, 39, 64	ES-36GI MACT Subpart ZZZZ	Diesel-fired emergency generator (80 kW maximum output)	None	None
8, 39, 64	ES-49GI MACT Subpart ZZZZ	Diesel-fired emergency generator (45 kW maximum output)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
8, 39, 64, 76	ES-74GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (25 kW maximum output)	None	None
8, 39, 64, 76	ES-75GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (25 kW maximum output)	None	None
8, 39, 64, 76	ES-77GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (25 kW maximum output)	None	None
8, 39, 64, 76	ES-83GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
8, 39, 64, 76	ES-84GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
8, 39, 64, 76	ES-85GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
8, 39, 64, 76	ES-86GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
8, 39, 64, 76	ES-87GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (350 kW maximum output)	None	None
8, 39, 64, 76	ES-88GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (180 kW maximum output)	None	None
8, 39, 64, 76	ES-89GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (200 kW maximum output)	None	None
8, 39, 64, 76	ES-90GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (200 kW maximum output)	None	None
8, 39, 64	ES-91GI MACT Subpart ZZZZ	Diesel-fired emergency generator (80 kW maximum output)	None	None
8, 39, 64, 76	ES-93GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
8, 39, 64, 76	ES-94GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (250 kW maximum output)	None	None
8, 39, 64, 76	ES-95GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
8, 39, 64, 76	ES-96GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
8, 39, 64, 76	ES-97GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
8, 39, 64, 76	ES-100GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
8, 39, 64	ES-101GI MACT Subpart ZZZZ	Diesel-fired emergency generator (125 kW maximum output)	None	None
9, 39, 64	ES-102GI MACT Subpart ZZZZ	Diesel-fired emergency generator (400 kW maximum output)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
9, 39, 64	ES-104GI MACT Subpart ZZZZ	Diesel-fired emergency generator (500 kW maximum output)	None	None
9, 39, 64	ES-105GI MACT Subpart ZZZZ	Diesel-fired emergency generator (100 kW maximum output)	None	None
9, 38, 64	ES-106GI MACT Subpart ZZZZ	Diesel-fired emergency generator (415 kW maximum output)	None	None
9, 39, 64, 76	ES-108GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (80 kW maximum output)	None	None
9, 39, 64, 76	ES-109GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (80 kW maximum output)	None	None
9, 39, 64, 76	ES-110GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (600 kW maximum output)	None	None
9, 39, 64, 76	ES-112GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (25 kW maximum output)	None	None
9, 39, 64	ES-113GI MACT Subpart ZZZZ	Diesel-fired emergency generator (7.5 kW maximum output)	None	None
9, 39, 64	ES-116GI MACT Subpart ZZZZ	Diesel-fired emergency generator (25 kW maximum output)	None	None
9, 39, 64	ES-117GI MACT Subpart ZZZZ	Diesel-fired emergency generator (25 kW maximum output)	None	None
9, 39, 64	ES-118GI MACT Subpart ZZZZ	Diesel-fired emergency generator (25 kW maximum output)	None	None
9, 39, 64	ES-120GI MACT Subpart ZZZZ	Diesel-fired emergency generator (50 kW maximum output)	None	None
9, 39, 64	ES-121GI MACT Subpart ZZZZ	Diesel-fired emergency generator (50 kW maximum output)	None	None
9, 39, 64	ES-122GI MACT Subpart ZZZ	Diesel-fired emergency generator (50 kW maximum output)	None	None
9, 39, 64	ES-124GI MACT Subpart ZZZZ	Diesel-fired emergency generator (60 kW maximum output)	None	None
9, 39, 64	ES-127GI MACT Subpart ZZZZ	Diesel-fired emergency generator (100 kW maximum output)	None	None
9, 39, 64, 76	ES-129GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
9, 39, 64	ES-132GI MACT Subpart ZZZZ	Diesel-fired emergency generator (150 kW maximum output)	None	None
9, 39, 64, 76	ES-133GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (150 kW maximum output)	None	None
9, 39, 64	ES-140GI MACT Subpart ZZZZ	Diesel-fired emergency generator (275 kW maximum output)	None	None
9, 39, 64	ES-141GI MACT Subpart ZZZZ	Diesel-fired emergency generator (500 kW maximum output)	None	None
9, 39, 64	ES-142GI MACT Subpart ZZZZ	Diesel-fired emergency generator (600 kW maximum output)	None	None
9, 39, 64, 76	ES-144GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (150 kW maximum output)	None	None
10, 39, 64, 76	ES-145GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (600 kW maximum output)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
10, 39, 64, 76	ES-146GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (500 kW maximum output)	None	None
10, 39, 64, 76	ES-147GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
10, 39, 64	ES-148GI MACT Subpart ZZZ	Diesel-fired emergency generator (125 kW maximum output)	None	None
10, 39, 64, 76	ES-149GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (150 kW maximum output)	None	None
10, 39, 64	ES-150GI MACT Subpart ZZZZ	Diesel-fired emergency generator (200 kW maximum output)	None	None
10, 39, 64	ES-152GI MACT Subpart ZZZZ	Diesel-fired emergency generator (500 kW maximum output)	None	None
10, 39, 64, 76	ES-153GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
10, 39, 64, 76	ES-154GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
10, 39, 64, 76	ES-155GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (20 kW maximum output)	None	None
10, 39, 64, 76	ES-156GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (20 kW maximum output)	None	None
10, 39, 64, 76	ES-157GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (20 kW maximum output)	None	None
10, 39, 64, 76	ES-158GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (20 kW maximum output)	None	None
10, 39, 64, 76	ES-160GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (450 kW maximum output)	None	None
10, 39, 64, 76	ES-161GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
10, 39, 64, 76	ES-162GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (150 kW maximum output)	None	None
10, 39, 64, 76	ES-163GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (150 kW maximum output)	None	None
10, 39, 64, 76	ES-164GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
10, 39, 64, 76	ES-165GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (75 kW maximum output)	None	None
10, 39, 64, 76	ES-181GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (42 kW maximum output)	None	None
11, 39, 64, 76	ES-182GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (60 kW maximum output)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
11, 39, 64, 76	ES-183GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (125 kW maximum output)	None	None
11, 39, 64, 76	ES-184GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (400 kW maximum output)	None	None
11, 39, 64, 76	ES-185GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (42 kW maximum output)	None	None
11, 39, 64, 76	ES-186GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (35 kW maximum output)	None	None
11, 39, 64, 76	ES-187GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (400 kW maximum output)	None	None
11, 39, 64, 76	ES-188GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (60 kW maximum output)	None	None
11, 39, 64, 76	ES-189GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (80 kW maximum output)	None	None
11, 39, 64, 76	ES-190GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (1000 kW maximum output)	None	None
11, 39, 64, 76	ES-191GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (655 kW maximum output)	None	None
11, 39, 64, 76	ES-192GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (655 kW maximum output)	None	None
11, 39, 64, 76	ES-193GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
11, 39, 64, 76	ES-194GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
11, 39, 64, 76	ES-195GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (200 kW maximum output)	None	None
11, 39, 64, 76	ES-196GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
11, 39, 64, 76	ES-197GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (100 kW maximum output)	None	None
11, 39, 64, 76	ES-198GI MACT Subpart ZZZZ NSPS Subpart IIII	Diesel-fired emergency generator (600 kW maximum output)	None	None
Fire Pumps				
11, 64, 76	ES-01FPA2838 MACT Subpart ZZZZ	Fire pump (235 hp)	None	None
11, 64, 76	ES-02FPH3838 MACT Subpart ZZZ	Fire pump (60 hp)	None	None
12, 64, 76	ES-03FPHH4983 MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (188 hp, 140 kW)	None	None
12, 64	ES-04FPH6628 MACT Subpart ZZZZ	Fire pump (60 hp)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
12, 64, 76	ES-05FPP4543A MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (175 hp, 130 kW)	None	None
12, 64, 76	ES-06FPP4543B MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (175 hp, 130 kW)	None	None
12, 64, 76	ES-07FPP4543C MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (175 hp)	None	None
12, 64	ES-08FPP4543D MACT Subpart ZZZZ	Fire pump (208 hp)	None	None
12, 64	ES-09FPR3065 MACT Subpart ZZZZ	Fire pump (350 hp)	None	None
12, 64	ES-10FPW3396 MACT Subpart ZZZZ	Fire pump (260 hp)	None	None
12, 64	ES-12FPO19RSB MACT Subpart ZZZZ	Fire pump (112 hp)	None	None
12, 64, 76	ES-13FPO19F3 MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (113 hp, 84 kW)	None	None
12, 64, 76	ES-14FPF4706A MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (288 hp)	None	None
12, 64, 76	ES-15FPF4706B MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (288 hp)	None	None
12, 64, 76	ES-16FPATF MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (157 hp)	None	None
12, 64, 76	ES-17FPO19F2 MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (Diesel-fired, 54 kW, 72.4 hp)	None	None
12, 64, 76	ES-18FPSAAF MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (Diesel-fired, 228 kW)	None	None
12, 64, 76	ES-19FPSAAF MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (Diesel-fired, 228kW)	None	None
12, 64, 76	ES-20FPSAAF MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (Diesel-fired, 228 kW)	None	None
12, 64, 76	ES-21FPSAAF MACT Subpart ZZZZ NSPS Subpart IIII	Fire pump (Diesel-fired, 228 kW)	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
12, 64, 76	ES-113FPO19RSA MACT Subpart ZZZZ	Fire pump (90 hp)	None	None
		Cogeneration System		
12, 42	ES-33B NSPS, Subpart GG	One natural gas, No. 2 fuel oil-fired cogeneration gas turbine (60.32 million Btu per hour maximum heat input, 5.0 megawatt electrical output)	None	None
13, 42, 79	ES-34B NSPS Subpart Dc 2D .1109 Case-By-Case MACT	One heat recovery steam generator (61.2 million Btu per hour maximum heat input)	None	None
		Painting operations		
13, 46, 56	ES-01C ES-02C	Two paint spray booths, located in Building Y-4804 [Main]	CD-01C and CD-02C	Fabric filters
13, 46, 56	ES-08C	One paint spray booth, located at the new Special Operations Training Facility [SOTF]	CD-08C	Fabric filter
13, 46, 56	ES-09C	One dry filter-type paint spray booth (ES-09C) using non-reactive water Reducible Chemical Agent Resistant Coatings only, along with natural gas-fired make-up air heater (3.3 million Btu per hour total heat input capacity, IES-09C) located in the Materiel Maintenance Building (Y-4804)	CD-09C	Fabric filter
13, 48, 56, 57	ES-10C MACT Subpart GG	One dry filter paint spray booth (ES-10C) with direct natural gas-fired make-up air heater (3.3 million Btu per hour heat input, ID No. IES-10H) located in building No. P-3354)	CD-10C	One thermal oxidizer (1.2 million Btu per hour heat input)
13, 48, 56, 57	ES-12C MACT Subpart GG	Paint spray booth with HVLP application located at Simmons Air Field	CD-12C	Fabric filter
		Engine Test Stands		
13, 50	ES-01E	Diesel vehicle engine test stand located at the Materiel Maintenance Division, Bldg Y-5015	None	None
13, 50	ES-02E	Diesel vehicle engine test stand located at the Materiel Maintenance Division, Bldg Y-5015	None	None
		Miscellaneous		
13, 52	ES-01PC	Plasma arc cutter	CD-01PC	Cartridge filter dust collector
13, 50	ES-01P	One paper pulverizer	CD-01P	One fabric filter (612 square feet of surface area)
13, 53	ES-01TP	Tank cleaning and purging system with direct propane-fired contact water heater (5.0 mmBtu per hour heat input)	None	None
13, 82	ES-27W	Welding operation (A-3319)	None	None
13, 82	ES-28W	Welding operation (Building M-8311)	None	None

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions
The emission source(s) and associated air pollution control devices and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Three boilers (No. 2 fuel oil/ natural gas-fired with low NOx burners, 41 million Btu per hour heat input capacity each when firing No. 2 fuel and 42 million Btu per hour input capacity each when firing natural gas, ID Nos. ES-01CMA, ES-02CMA, ES-03CMA) located in Building CMA/D-3529

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Any fuel: 0.03 lbs/mmBtu heat input -or- No PM limit for boilers combusting oil with a sulfur content less than 0.5 percent sulfur (based on fuel oil supplier certifications {40 CFR §60.43c(e)}	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Sulfur dioxide	0.5 percent sulfur content by weight for No. 2 fuel oil	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Visible emissions	20 percent opacity, not to exceed six-minute average of 27 percent	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Nitrogen dioxide	Less than 44.42 tons per consecutive 12-month period	15A NCAC 2D .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc - PARTICULATE EMISSIONS
(For boilers constructed after February 28, 2005)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum particulate emissions from No. 2 fuel oil shall not exceed 0.03 lbs per million Btu heat input.

c. **Testing Requirements** {40 CRF 60.45c}:
As required by 15A NCAC 2D .0524, the following initial performance tests shall be conducted:
   i. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR Part 60 Appendix A.
   ii. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and requirements.
   iii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the initial start-up of the affected facility, the Permittee shall conduct the required performance test and submit a written report of the test(s) results.
   iv. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
   v. All associated testing costs are the responsibility of the Permittee.

Monitoring/Recordkeeping [40 CFR Part 60, §60.47c (c)]

d. Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emissions rates of 0.06 lb/mmBtu heat input or less and that do not use a post combustion technology to reduce PM emissions are not required to operate a

CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f). Use fuel supplier certification that includes the following information:

i. The name of the oil or gas supplier;
ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil is in §60.41c;
iii. The sulfur content of the oil or gas;
iv. The amounts of natural gas and/or No. 2 fuel oil fired in the boiler.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

e. **Reporting**

The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc –SULFUR DIOXIDE

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 2Q .0508(f)]

c. Sulfur dioxide emissions shall be monitored as follows:
   i. Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR §60.46c(e).

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if sulfur dioxide emissions are not monitored as described above.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. In addition to any other recordkeeping required by 40 CFR §60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired during each month.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. In addition to any other reporting required by 40 CFR §60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
   i. Distillate Oil - Fuel supplier certification shall include the following information:
   (1) the name of the oil supplier;
   (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR §60.41c; and
   (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the semi annual period.

All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0524, 40 CFR Part 60, Subpart Dc: CONTROL OF VISIBLE EMISSIONS
(For boilers greater than or equal to 30 million Btu per hour heat input)

a. Visible emissions from each boiler (ID Nos. ES-01CMA, 02CMA, 03CMA) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 27 percent opacity. [15A NCAC 2D .0524, Subpart Dc]

Testing [15A NCAC 2D .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 A.3.a. above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, Subpart Dc.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing No. 2 fuel oil or natural gas in any boiler.

4. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – NITROGEN DIOXIDE

a. In order to avoid applicability of 15A NCAC 2D .0530 (g) for major sources and major modifications, boilers (ID Nos. ES-01CMA, 02CMA, and 03CMA) shall discharge into the atmosphere less than 44.42 tons of nitrogen dioxide total, per consecutive 12-month period. [15A NCAC 2D .0530]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 4. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the fuel usage is not monitored.

d. The use of fuel in boilers (ES-01CMA, 02CMA, 03CMA) shall be limited such that the total nitrogen dioxide emissions shall not exceed 44.42 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$\sum NOx\,(tons/month) =$$

$$\left\langle \left[\frac{(A+B+C)\ gallons\,No.\,2\ f.o.}{month} \times \frac{16.6\ lbs.\ NOx}{1000\,gal.\,f.o.} \right] + \left[\frac{(D+E+F)}{month} \times \frac{50\,lbs\ NOx}{1\times 10^{6}\,scf} \right] \right\rangle \times \frac{1\,ton\ NOx}{2000\,lbs\ NOx}$$

A = monthly usage (gallons/month) of No. 2 fuel oil in boiler ES-01CMA
B = monthly usage (gallons/month) of No. 2 fuel oil in boiler ES-02CMA
C = monthly usage (gallons/month) of No. 2 fuel oil in boiler ES-03CMA
D = monthly usage (10^6 scf natural gas/month) of natural gas in boiler ES-01CMA
E = monthly usage (10^6 scf natural gas/month) of natural gas in boiler ES-02CMA
F = monthly usage (10^6 scf natural gas/month) of natural gas in boiler ES-03CMA
Emission factor natural gas (AP-42, low NOx burners) = 50 lbs NOx/10^6 scf
Emission factor No. 2 fuel oil (AP-42) = 16.6 lbs NOx/1000 gallons No. 2 fuel oil

Where: Boiler NOx = total emissions of nitrogen dioxide (tons/month)
A + B + C = total gallons of No. 2 fuel oil burned in the boilers in one specific month
D + E + F = total cubic feet of natural gas burned in the boilers in one specific month
Emission Factor (natural gas) = AP-42 factor for low NOx burner (50 lbs NOx/10^6 ft^3)

Emission Factor (No. 2 f.o.) = Vendor factor (16.6 lbs NOx/1000 gallon)

Reporting [15A NCAC 2Q .0508 (f)]

5. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   a. The monthly NOx emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
   b. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months.

B. Two boilers (natural gas/No. 2 fuel oil-fired, 25.0 million Btu per hour heat input capacity each, ID Nos. ES-11B and ES-12B) located in Building N-6002 [COSCOM]

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.23 lbs/million Btu heat input each boiler	15A NCAC 2D .0503
Sulfur dioxide	2.3 lbs per million Btu heat input each boiler	15A NCAC 2D .0516
Visible emissions	20 percent opacity each boiler	15A NCAC 2D .0521
Sulfur dioxide	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATE EMISSIONS FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas and No. 2 fuel oil that are discharged from these boilers (ID Nos. ES-11B and ES-12B) into the atmosphere shall not exceed 0.23 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas or No. 2 fuel oil in any boiler.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from boilers (ID Nos. ES-11B and ES-12B) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas or No. 2 fuel oil in any boiler.

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each of these boilers (ID Nos. ES-11B and ES-12B) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas or No. 2 fuel oil in any boiler.

4. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION - SULFUR DIOXIDE

a. In order to avoid applicability of 15A NCAC 2D .0530 (g) for major sources and major modifications, boilers (ID Nos. ES-11B and ES-12B) shall discharge into the atmosphere less than 40 tons of sulfur dioxide total, per consecutive 12-month period. [15A NCAC 2D .0530]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 4. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.
d. In no case shall the fuel sulfur content exceed 0.5 percent by weight.
e. In no case shall the total amount of No. 2 fuel oil burned exceed 1,112, 696 gallons per consecutive 12 month period.
f. The use of fuel in boilers (ID Nos. ES-11B and ES-12B) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = Y \times 0.6 \frac{lbs\ sulfur dioxide}{million\ cubic\ feet} + Z \times \frac{142\ lbs\ sulfur dioxide}{1000\ gallon\ fuel oil} \times S$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boilers in cubic feet
Z is the amount of No. 2 fuel oil used in the boiler in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2. 1 B. 4. a.

Reporting [15A NCAC 2Q .0508(f)]

g. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
   iii. The highest sulfur content for the fuel oil.

C. Three boilers (natural gas/No. 2 fuel oil-fired boiler, 23.4 million Btu per hour heat input capacity each, ID Nos. ES-24B, ES-25B, and 10 million Btu per hour heat input capacity for ES-26B, NSPS) located in the new Womack Hospital Boiler Plant, Building 4-2811

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.20 pounds per million Btu heat input each	15A NCAC 2D .0503
Sulfur dioxide	0.5 percent by weight sulfur content by weight	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Visible emissions	20 percent opacity each	15A NCAC 2D .0521
Nitrogen dioxide	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Sulfur dioxide	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas or No. 2 fuel oil that are discharged from this source into the atmosphere shall not exceed 0.20 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2D .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. The Permittee shall record and maintain records of the amounts of each fuel burned during each month. The Permittee shall submit a summary report of the fuel records by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc –SULFUR DIOXIDE

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 2Q .0508(f)]

c. Sulfur dioxide emissions shall be monitored as follows:
Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR § 60.46c(e).

Recordkeeping [15A NCAC 2Q .0508(f)]

d. In addition to any other recordkeeping required by 40 CFR § 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel burned during each month.

Reporting [15A NCAC 2Q .0508(f)]

e. In addition to any other reporting required by 40 CFR § 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
   i. a summary report , acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate or residual fuel oil fired, submitted within 30 days after each calendar year quarter, due by January 30, April 30, July 30, and October 30 of each calendar year for the preceding three-month period as follows:
      (A) Distillate Oil - Fuel supplier certification shall include the following information:
         (1) the name of the oil supplier;
         (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR § 60.41c; and
         (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the quarter.
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0521: VISIBLE EMISSIONS

a. Visible emissions from each of the boilers (ID Nos. ES-24B, ES-25B, ES-26B) shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging more than 87 percent opacity may occur not more than once in any hour nor more than four times per in a 24-hour period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing natural gas or No. 2 fuel oil in any boiler.

4. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATTION - Nitrogen Dioxide

a. In order to avoid applicability of 15A NCAC 2D .0530 (g) for major sources and major modifications, boilers (ID Nos. ES-24B, ES-25B, ES-26B) shall discharge into the atmosphere less than 40 tons of nitrogen dioxide total, per consecutive 12-month period. [15A NCAC 2D .0530]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 4. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the fuel usage is not recorded.

d. The usage of natural gas in boilers (ID Nos. ES-24B, ES-25B, and ES-26B) shall be limited to 570 million cubic feet per year. Calculations shall be made monthly and recorded in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records specified above are not kept.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly nitrogen dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months.

5. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION - Sulfur Dioxide

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boilers (ID Nos. ES-24B, ES-25B, and ES-26B), shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 5. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

d. The use of fuel in boilers (ID Nos. ES-24B, ES-25B, and ES-26B) shall be limited to 986,000 gallons per year total, such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = Y \times 0.6 \frac{lbs\ sulfur dioxide}{million\ cubic\ feet} + Z \times \frac{142\ lbs\ sulfur dioxide}{1000\ gallon\ fuel oil} \times S$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boilers in cubic feet
Z is the amount of No. 2 fuel oil used in the boilers in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2.1 C. 5. a.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
   iii. The highest sulfur content for the fuel oil for the six-month time period.

D. Two natural gas-fired boilers (20.0 million Btu heat input capacity each, ID Nos. ES-27B and ES-28B) located at building E-2823

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.20 pounds per million Btu heat input each	15A NCAC 2D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATE EMISSIONS FROM FUEL BURNING INDIRECT HEAT

EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas, that are discharged from these boilers (ID Nos. ES-27B and ES-28B) into the atmosphere shall not exceed 0.20 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas in any boiler.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from boilers (ID Nos. ES-27B and ES-28B) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 D. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in any boiler.

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each of the boilers (ID Nos. ES-27B and ES-28B) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing natural gas in any boiler.

E. One natural gas/No. 2 fuel oil-fired boiler (72.3 million Btu per hour heat input capacity, ID No. ES-29B, NSPS) located in Building C-2337 [82nd Division]

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.20 pounds per million Btu heat input each	15A NCAC 2D .0503
Sulfur dioxide	0.5 percent by weight sulfur content by weight	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Visible emissions	20 percent opacity each	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Nitrogen dioxide	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Sulfur dioxide	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas or No. 2 fuel oil that are discharged from this source into the atmosphere shall not exceed 0.20 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 E. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall record and maintain records of the amounts of each fuel burned during each month.

2. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc - Sulfur Dioxide Emissions

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 2Q .0508(f)]

c. Sulfur dioxide emissions shall be monitored as follows:
Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR § 60.46c(e).

Recordkeeping [15A NCAC 2Q .0508(f)]

d. In addition to any other recordkeeping required by 40 CFR §60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel burned during each month.

Reporting [15A NCAC 2Q .0508(f)]

e. In addition to any other reporting required by 40 CFR § 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
   i. a summary report , acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate or residual fuel oil fired, submitted within 30 days after each calendar year quarter, due by January 30, April 30, July 30, and October 30 of each calendar year for the preceding three-month period as follows:
      (A) Distillate Oil - Fuel supplier certification shall include the following information:
         (1) the name of the oil supplier;
         (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR § 60.41c; and
         (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the quarter.

   ii. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc - Visible Emissions

a. Visible emissions from each of boiler (ID No. ES-29B) shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging more than 27 percent opacity may occur not more than once in any hour nor more than four times per in a 24-hour period.

Testing [15A NCAC 2D .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing natural gas, No. 2 fuel oil, or used No. 2 fuel oil in this boiler.

4. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATTION - Nitrogen Dioxide

a. In order to avoid applicability of 15A NCAC 2D .0530 (g) for major sources and major modifications, boiler (ID No. ES-29B) shall discharge into the atmosphere less than 40 tons of nitrogen dioxide, per consecutive 12-month period. [15A NCAC 2D .0530]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E. 4. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the fuel usage is not recorded.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly nitrogen dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas, No. 2 fuel oil, or used No. 2 fuel oil consumed for the previous 17 months.

5. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION - Sulfur Dioxide

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boiler (ID No. ES-29B), shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E. 5. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

d. The use of fuel in boiler (ID Nos. ES-29B) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = \left[Y \times 0.6 \frac{lbs\ sulfur\ dioxide}{million\ cubic\ feet}\right] + \left[Z \times \frac{142\ lbs\ sulfur\ dioxide}{1000\ gallon\ fuel\ oil} \times S\right]$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boilers in cubic feet
Z is the amount of No. 2 fuel oil used in the boilers in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2. 1 E. 5. a.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and/or No. 2 fuel oil consumed for the previous 17 months; and
   iii. The highest sulfur content for the fuel oil.

F. Three boilers (Natural gas/No. 2 fuel oil-fired, 8.3 million Btu per hour heat input capacity each, ID Nos. ES-30B, ES-31B, and ES-32B) located at SOTF

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.23 lbs/million Btu heat input each boiler	15A NCAC 2D .0503
Sulfur dioxide	2.3 lbs per million Btu heat input each boiler	15A NCAC 2D .0516
	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Visible emissions	20 percent opacity each boiler	15A NCAC 2D .0521
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATE EMISSIONS FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas or No. 2 fuel oil that is discharged from these boilers (ID Nos. ES-30B, 31B, and 32B) into the atmosphere shall not exceed 0.23 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of No. 2 fuel oil in any boiler.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from boilers (ID Nos. ES-30B, 31B, and 32B) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ

found in Section 3. If the results of this test are above the limit given in Section 2.1 F. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in any boiler.

3. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – SULFUR DIOXIDE

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boilers (ID Nos. ES-30B, 31B, and 32B), shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F. 3. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

d. The use of fuel in boilers (ID Nos. ES-30B, ES-31B, and ES-32B) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = \left(Y \times \frac{0.6\, lbs\, sulfur dioxide}{million\, cubic\, feet} \right) + \left(Z \times \frac{142\, lbs\, sulfur dioxide}{1000 gallon\, fuel oil} \times S \right)$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boilers in cubic feet
Z is the amount of No. 2 fuel oil used in the boilers in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2. 1 F. 3. a.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
   iii. The highest sulfur content for the fuel oil for the six-month time period.

4. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each of these boilers (ID Nos. ES-30B, ES-31B, and ES-32B) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ.

If the results of this test are above the limit given in Section 2.1 F. 4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in any boiler.

G. One natural gas/No. 2 fuel oil-fired "temporary backup" boiler (up to 72.3 million Btu per hour heat input capacity, ID No. ES-35B, NSPS)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.19 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide	0.5 percent by weight	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Visible emissions	20 percent opacity	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATE EMISSIONS FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas or No. 2 fuel oil that are discharged from boiler (ES-35B) into the atmosphere shall not exceed 0.19 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 G. 1. a. above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

15A NCAC 2D .0524: 40 CFR PART 60, SUBPART Dc – PARTICULATE EMISSIONS

Monitoring/Recordkeeping/Reporting

c. The Permittee shall record and maintain records of the amounts of each fuel burned during each month. The Permittee shall submit a summary report of the fuel records by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the monthly fuel records are not recorded and maintained.

2. 15A NCAC 2D .0524: 40 CFR PART 60, SUBPART Dc - SULFUR DIOXIDE EMISSIONS

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum sulfur content of any fuel oil received and burned in boiler (ES-35B) shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 2Q .0508(f)]

c. Sulfur dioxide emissions shall be monitored as follows:

Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR § 60.46c(e).

Recordkeeping [15A NCAC 2Q .0508(f)]

d. In addition to any other recordkeeping required by 40 CFR § 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel burned during each month.

Reporting [15A NCAC 2Q .0508(f)]

e. In addition to any other reporting required by 40 CFR § 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in WRITING of the following: a summary report, acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate fired, submitted within 30 days after each calendar year quarter, due by January 30, April 30, July 30, and October 30 of each calendar year for the preceding three-month period as follows:
Distillate Oil - Fuel supplier certification shall include the following information:
(A) the name of the oil supplier;
(B) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR § 60.41c; and
(C) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the quarter.

f. All instances of deviations from the requirements of this permit must be clearly identified.
Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, Subpart Dc sulfur dioxide emissions if monitoring and recordkeeping are not maintained.

3. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – SULFUR DIOXIDE

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boiler (ID Nos. ES-35B), shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G. 3. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

d. The use of fuel in boiler (ID Nos. ES-35B) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = \left(Y \times \frac{0.6\, lbs\, sulfur dioxide}{million\, cubic\, feet} \right) + \left(Z \times \frac{142\, lbs\, sulfur dioxide}{1000 gallon\, fuel oil} \times S \right)$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boiler in cubic feet
Z is the amount of No. 2 fuel oil used in the boiler in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2. 1 G. 3. a.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each

calendar year for the preceding six-month period between January and June. The report shall contain the following:

i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
iii. The highest sulfur content for the fuel oil for the six-month time period.

4. 15A NCAC 2D .0524, 40 CFR Part 60, Subpart Dc: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from boiler (ES-35B) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 27 percent opacity. [15A NCAC 2D .0524, Subpart Dc]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 G. 4. a. above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, Subpart Dc.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing No. 2 fuel oil or natural gas in this boiler.

H. Two natural gas/No. 2 fuel oil-fired boilers (10.5 million Btu per hour heat input capacity each, ID Nos. ES-36B, 37B, NSPS) and two natural gas-fired boilers (9.64 million Btu per hour heat input each, ID Nos. ES-38B, 39B)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.19 pounds per million Btu heat input each	15A NCAC 2D .0503
Sulfur dioxide	0.5 percent by weight sulfur content by weight	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Visible emissions	20 percent opacity each	15A NCAC 2D .0521
Sulfur dioxide	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil that are discharged from these sources into the atmosphere shall not exceed 0.19 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 H. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f), 40 CFR Part 60, Subpart Dc]

c. The Permittee shall record and maintain records of the amounts of each fuel burned during each month. The Permittee shall submit a summary report of the fuel records by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc –SULFUR DIOXIDE

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting,

recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 2Q .0508(f)]

c. Sulfur dioxide emissions shall be monitored as follows:
Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR § 60.46c(e).

Recordkeeping [15A NCAC 2Q .0508(f)]

d. In addition to any other recordkeeping required by 40 CFR § 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel burned during each month.

Reporting [15A NCAC 2Q .0508(f)]

e. In addition to any other reporting required by 40 CFR § 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
   i. a summary report , acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate or residual fuel oil fired, submitted within 30 days after each calendar year quarter, due by January 30, April 30, July 30, and October 30 of each calendar year for the preceding three-month period as follows:
      (A) Distillate Oil - Fuel supplier certification shall include the following information:
         (1) the name of the oil supplier;
         (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR § 60.41c; and
         (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the quarter.
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0521: VISIBLE EMISSIONS

a. Visible emissions from each of the boilers (ID Nos. ES-36B, ES-37B, ES-38B, and ES-39B) shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging more than 87 percent opacity may occur not more than once in any hour nor more than four times per in a 24-hour period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 H. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing natural gas or No. 2 fuel oil in any boiler.

4. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – SULFUR DIOXIDE

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boilers (ID Nos. ES-36B and ES-37B), shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H. 4. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

d. The use of fuel in boilers (ID Nos. ES-36B and ES-37B) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = \left(Y \times \frac{0.6\, lbs\, sulfur dioxide}{million\, cubic\, feet} \right) + \left(Z \times \frac{142\, lbs\, sulfur dioxide}{1000 gallon\, fuel oil} \times S \right)$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boilers in cubic feet
Z is the amount of No. 2 fuel oil used in the boilers in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2. 1 H. 4. a.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
iii. The highest sulfur content for the fuel oil for the six-month time period.

5. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – SULFUR DIOXIDE

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boilers (ID Nos. ES-38B and ES-39B), shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H. 5. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

d. The use of fuel in boilers (ID Nos. ES-38B and ES-39B) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = \left(Y \times \frac{0.6\, lbs\, sulfur dioxide}{million\, cubic\, feet} \right) + \left(Z \times \frac{142\, lbs\, sulfur dioxide}{1000 gallon\, fuel oil} \times S \right)$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boilers in cubic feet
Z is the amount of No. 2 fuel oil used in the boilers in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2. 1 H. 5. a.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
   iii. The highest sulfur content for the fuel oil for the six-month time period.

I. Four natural gas/No. 2 fuel oil-fired boilers (8.4 million Btu per hour heat input capacity each, ID Nos. ES-40B, 41B, 42B, and 43B)

Three natural gas-fired boilers (4.2 million Btu per hour heat input, ID No. ES-908B; 3.2 million Btu per hour heat input, ID No. ES-909B; and 2.7 million Btu per hour heat input, ID No. ES-910B)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.19 pounds per million Btu heat input each	15A NCAC 2D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity each	15A NCAC 2D .0521
For ID Nos. ES-40B, 41B, 42B, and 43B Sulfur dioxide	Less than 40 tons per year	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil that are discharged from these sources into the atmosphere shall not exceed 0.19 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 I. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas, or No. 2 fuel oil in these sources.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the boilers shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 I. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in any boiler.

3. 15A NCAC 2D .0521: VISIBLE EMISSIONS

a. Visible emissions from each of the boilers shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging more than 87 percent opacity may occur not more than once in any hour nor more than four times per in a 24-hour period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 I. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing natural gas or No. 2 fuel oil in any boiler.

4. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – SULFUR DIOXIDE

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boilers (ID Nos. ES-40B, 41B, 42B, and 43B), shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I. 4. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

d. The use of fuel in boilers (ID Nos. ES-40B, 41B, 42B, and 43B) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$X = \left(Y \times \frac{0.6\, lbs\, sulfur dioxide}{million\, cubic\, feet} \right) + \left(Z \times \frac{142\, lbs\, sulfur dioxide}{1000 gallon\, fuel oil} \times S \right)$$

Where: X is the total actual emissions of sulfur dioxide in pounds
Y is the total amount of natural gas used in the boilers in cubic feet
Z is the amount of No. 2 fuel oil used in the boilers in gallons
S is the percent sulfur in the No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2. 1 I. 4. a.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and

iii. The highest sulfur content for the fuel oil for the six-month time period.

J. One natural gas/No. 2 fuel oil-fired temporary boiler (up to 100 million Btu per hour heat input, ID No. ES-TEMPBOIL, NSPS)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	(If boiler is constructed prior to February 28, 2005) $E = 1.090 \times Q^{-0.2594}$ Where: E = allowable PM emission rate in (1bs/mmBtu heat input) Q = maximum heat input mmBtu per hour	15A NCAC 2D .0503
	(If boiler is constructed after to February 28, 2005) 0.03 lbs/mmBtu heat input	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Sulfur dioxide	0.5 percent sulfur content by weight	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Visible emissions	(If boiler is less than 30 mmBtu/ hour heat input) 20 percent opacity, not to exceed six-minute average of 87 percent	15A NCAC 2D .0521
	(If boiler is 30 mmBtu/ hour heat input or more) 20 percent opacity, not to exceed six-minute average of 27 percent	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Nitrogen dioxide	Less than 40 tons per consecutive 12-month period See Multiple Emissions Section 2.2 H	15A NCAC 2D .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS (Applies if the boiler is constructed prior to February 28, 2005)

a. Emissions of particulate matter from the combustion of natural gas or No. 2 fuel oil, that are discharged from this source into the atmosphere shall not exceed *** pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

*** This value is determined by the following equation and the size of the boiler for heat input rates up to 100 million Btu per hour heat input.

$E = 1.090 \times Q^{-0.2594}$

Where: E = allowable PM emission rate in 1bs/mmBtu heat input
Q = maximum heat input in mmBtu per hour

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 J. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall record and maintain records of the amounts of each fuel burned during each month. The Permittee shall submit a summary report of the fuel records by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc - PARTICULATE EMISSIONS
(Applies if the boiler is constructed after February 28, 2005)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum particulate emissions from No. 2 fuel oil shall not exceed 0.03 lbs per million Btu heat input.

c. **Testing Requirements** {40 CRF 60.45c}
As required by 15A NCAC 2D .0524, the following initial performance tests shall be conducted:
   i. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR Part 60 Appendix A.
   ii. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and requirements.
   iii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the initial start-up of the affected facility, the Permittee shall conduct the required performance test and submit a written report of the test(s) results.
   iv. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
   v. All associated testing costs are the responsibility of the Permittee.

Monitoring/Recordkeeping [40 CFR Part 60, §60.47c (c)]

d. Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emissions rates of 0.06 lb/mmBtu heat input or less and the do not use a post combustion technology to reduce PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f). Use fuel supplier certification that includes the following information:
   i. The name of the oil or gas supplier;
   ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil is in §60.41c;
   iii. The sulfur content of the oil or gas.
   iv. The amounts of natural gas and/or No. 2 fuel oil fired in the boiler.
   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

e. **Reporting** [15A NCAC 2Q .0508(f)]
The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc –SULFUR DIOXIDE

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 2Q .0508(f)]

c. Sulfur dioxide emissions shall be monitored as follows:
   i. Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR §60.46c(e).

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if sulfur dioxide emissions are not monitored as described above.

   Recordkeeping [15A NCAC 2Q .0508(f)]

d. In addition to any other recordkeeping required by 40 CFR §60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired during each month.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

   Reporting [15A NCAC 2Q .0508(f)]

e. In addition to any other reporting required by 40 CFR §60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
   i. Distillate Oil - Fuel supplier certification shall include the following information:
   (1) the name of the oil supplier;
   (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR §60.41c; and
   (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the semi annual period.

   All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 2D .0521 – VISIBLE EMISSIONS [15A NCAC 2Q .0508(f)]
(Applies if the boiler less than 30 million Btu per hour heat input)

a. Visible emissions from boiler (ID No. TEMPBOIL) shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging more than 87 percent opacity may occur not more than once in any hour nor more than four times per in a 24-hour period.

   Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J. 4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

   Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing natural gas or No. 2 fuel oil in the boiler.

5. 15A NCAC 2D .0524, 40 CFR Part 60, Subpart Dc: CONTROL OF VISIBLE EMISSIONS
(Applies if boiler is 30 million Btu per hour heat input or greater)

a. Visible emissions from boiler (TEMPBOIL) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 27 percent opacity. [15A NCAC 2D .0524, Subpart Dc]

   Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 J. 5. a. above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, Subpart Dc.

   Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing No. 2 fuel oil in this boiler.

K. Three No. 2 fuel oil/natural gas-fired boilers with low NOx burners (45.42 million Btu per hour heat input

each, ID Nos. ES-44B, 45B, and 46B, NSPS)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.03 lbs/mmBtu heat input	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Sulfur dioxide	0.5 percent sulfur content by weight for No. 2 fuel oil	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Visible emissions	20 percent opacity, not to exceed six-minute average of 27 percent	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Nitrogen dioxide	Less than 50 tons per consecutive 12-month period See Multiple Emissions Section 2.2 I.	15A NCAC 2D .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

1. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc - PARTICULATE EMISSIONS
(Applies if the boiler is constructed after February 28, 2005)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum particulate emissions from No. 2 fuel oil shall not exceed 0.03 lbs per million Btu heat input.

c. **Testing Requirements** {40 CRF 60.45c}
As required by 15A NCAC 2D .0524, the following initial performance tests shall be conducted:
   i. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR Part 60 Appendix A.
   ii. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and requirements.
   iii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the initial start-up of the affected facility, the Permittee shall conduct the required performance test and submit a written report of the test(s) results.
   iv. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
   v. All associated testing costs are the responsibility of the Permittee.

Monitoring/Recordkeeping [40 CFR Part 60, §60.47c (c)]

d. Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emissions rates of 0.06 lb/mmBtu heat input or less and the do not use a post combustion technology to reduce PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f). Use fuel supplier certification that includes the following information:
   i. The name of the oil or gas supplier;
   ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil is in §60.41c;
   iii. The sulfur content of the oil or gas;
   iv. The amounts of natural gas and/or No. 2 fuel oil fired in the boiler.
   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

e. **Reporting** [15A NCAC 2Q .0508(f)]

The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc –SULFUR DIOXIDE

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 2Q .0508(f)]

c. Sulfur dioxide emissions shall be monitored as follows:
   i. Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR §60.46c(e).

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if sulfur dioxide emissions are not monitored as described above.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. In addition to any other recordkeeping required by 40 CFR §60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired during each month.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. In addition to any other reporting required by 40 CFR §60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
   i. Distillate Oil - Fuel supplier certification shall include the following information:
   (1) the name of the oil supplier;
   (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR §60.41c; and
   (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the semi annual period.

   All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0524, 40 CFR Part 60, Subpart Dc: CONTROL OF VISIBLE EMISSIONS

(For boilers greater than or equal to 30 million Btu per hour heat input)

a. Visible emissions from each boiler (ID Nos. ES-44B, 45B, or 46B) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 27 percent opacity. [15A NCAC 2D .0524, Subpart Dc]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 K. 3. a. above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, Subpart Dc.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing No. 2 fuel oil or natural gas in any boiler.

L. Emergency and/or peak shaving generators/fire pumps located in various Buildings:

ID Number	Source Description	Size of Generator
ES-01PSG, MACT	Diesel fuel-fired	230 kW maximum output
ES-02PSG, MACT	Diesel fuel-fired	250 kW maximum output
ES-03PSG, MACT	Diesel fuel-fired	350 kW maximum output
ES-04PSG, MACT	Diesel fuel-fired	500 kW maximum output
ES-05PSG, MACT	Diesel fuel-fired	350 kW maximum output
ES-06PSG, MACT	Diesel fuel-fired	350 kW maximum output
ES-07PSG, MACT	Diesel fuel-fired	400 kW maximum output
ES-08PSG, MACT	Diesel fuel-fired	400 kW maximum output
ES-10PSG, MACT	Diesel fuel-fired	600 kW maximum output
ES-16PSG, MACT	Diesel fuel-fired	900 kW maximum output
ES-17PSG, MACT	Diesel fuel-fired	2700 kW maximum output
ES-24G, MACT	Diesel fuel-fired	1275 kW maximum output
ES-25G, MACT	Diesel fuel-fired	1275 kW maximum output
ES-26G, MACT	Diesel fuel-fired	1275 kW maximum output
ES-33G, MACT	Diesel fuel-fired	1750 kW maximum output
ES-36GI, MACT	Diesel fuel-fired	80 kW maximum output
ES-37G, MACT	Diesel fuel-fired	1250 kW maximum output
ES-38G, MACT	Diesel fuel-fired	600 kW maximum output
ES-41G, MACT, NSPS	Diesel fuel-fired	1000 kW maximum output
ES-42G, MACT, NSPS	Diesel fuel-fired	1000 kW maximum output
ES-43G, MACT, NSPS	Diesel fuel-fired	750 kW maximum output
ES-44G, MACT, NSPS	Diesel fuel-fired	500 kW maximum output
ES-45G, MACT, NSPS	Diesel fuel-fired	350 kW maximum output
ES-46G, MACT, NSPS	Diesel fuel-fired	455 kW maximum output
ES-49GI, MACT	Diesel fuel-fired	45 kW maximum output
ES-73G, MACT, NSPS	Diesel fuel-fired	300 kW maximum output
ES-74G, MACT	Diesel fuel-fired	150 kW maximum output
ES-74GI, MACT, NSPS	Diesel fuel-fired	25 kW maximum output
ES-75GI, MACT, NSPS	Diesel fuel-fired	25 kW maximum output
ES-77GI, MACT, NSPS	Diesel fuel-fired	25 kW maximum output
ES-80G, MACT, NSPS	Diesel fuel-fired	3100 kW maximum output
ES-81G, MACT, NSPS	Diesel fuel-fired	3100 kW maximum output
ES-82G, MACT, NSPS	Diesel fuel-fired	3100 kW maximum output
ES-83G, MACT, NSPS	Diesel fuel-fired	2500 kW maximum output
ES-83GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output
ES-84G, MACT, NSPS	Diesel fuel-fired	800 kW maximum output
ES-84GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output
ES-85G, MACT, NSPS	Diesel fuel-fired	150 kW maximum output
ES-85GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output
ES-86G, MACT, NSPS	Diesel fuel-fired	800 kW maximum output
ES-86GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output
ES-87G, MACT, NSPS	Diesel fuel-fired	900 kW maximum output
ES-87GI, MACT, NSPS	Diesel fuel-fired	350 kW maximum output
ES-88G, MACT, NSPS	Diesel fuel-fired	750 kW maximum output
ES-88GI, MACT, NSPS	Diesel fuel-fired	180 kW maximum output
ES-89GI, MACT, NSPS	Diesel fuel-fired	200 kW maximum output
ES-90G, MACT, NSPS	Diesel fuel-fired	2000 kW maximum output
ES-90GI, MACT, NSPS	Diesel fuel-fired	200 kW maximum output
ES-91G, MACT, NSPS	Diesel fuel-fired	2000 kW maximum output
ES-91GI, MACT	Diesel fuel-fired	80 kW maximum output
ES-92G, MACT, NSPS	Diesel fuel-fired	2000 kW maximum output
ES-93G, MACT, NSPS	Diesel fuel-fired	2000 kW maximum output

ID Number	Source Description	Size of Generator
ES-93GI, MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-94G, MACT, NSPS	Diesel fuel-fired	2000 kW maximum output
ES-94GI, MACT, NSPS	Diesel fuel-fired	250 KW maximum output
ES-95G, MACT, NSPS	Diesel fuel-fired	1230 kW maximum output
ES-95GI, MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-96G, MACT, NSPS	Diesel fuel-fired	1230 kW maximum output
ES-96GI, MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-97G, MACT, NSPS	Diesel fuel-fired	1230 kW maximum output
ES-97GI, MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-98G, MACT, NSPS	Diesel fuel-fired	1000 kW maximum output
ES-99G, MACT, NSPS	Diesel fuel-fired	1250 kW maximum output
ES-100G, MACT, NSPS	Diesel fuel-fired	750 kW maximum output
ES-100GI, MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-101G, MACT, NSPS	Diesel fuel-fired	1230 kW maximum output
ES-101GI, MACT	Diesel fuel-fired	125 kW maximum output
ES-102GI, MACT	Diesel fuel-fired	400 kW maximum output
ES-104GI, MACT	Diesel fuel-fired	500 kW maximum output
ES-105GI, MACT	Diesel fuel-fired	100 kW maximum output
ES-106GI, MACT	Diesel fuel-fired	415 kW maximum output
ES-108GI, MACT, NSPS	Diesel fuel-fired	80 kW maximum output
ES-109GI, MACT, NSPS	Diesel fuel-fired	80 kW maximum output
ES-110GI, MACT, NSPS	Diesel fuel-fired	600 kW maximum output
ES-112GI, MACT, NSPS	Diesel fuel-fired	25 kW maximum output
ES-113GI, MACT	Diesel fuel-fired	7.5 kW maximum output
ES-116GI, MACT	Diesel fuel-fired	25 kW maximum output
ES-117GI, MACT	Diesel fuel-fired	25 kW maximum output
ES-118GI, MACT	Diesel fuel-fired	25 kW maximum output
ES-120GI, MACT	Diesel fuel-fired	50 kW maximum output
ES-121GI, MACT	Diesel fuel-fired	50 kW maximum output
ES-122GI, MACT	Diesel fuel-fired	50 kW maximum output
ES-124GI, MACT	Diesel fuel-fired	60 kW maximum output
ES-127GI, MACT	Diesel fuel-fired	100 W maximum output
ES-129GI, MACT	Diesel fuel-fired	100 kW maximum output
ES-132GI, MACT	Diesel fuel-fired	150 kW maximum output
ES-133GI, MACT, NSPS	Diesel fuel-fired	150 W maximum output
ES-140GI, MACT	Diesel fuel-fired	275 W maximum output
ES-141GI, MACT	Diesel fuel-fired	500 kW maximum output
ES-142GI, MACT	Diesel fuel-fired	600 kW maximum output
ES-144GI, MACT, NSPS	Diesel fuel-fired	150 kW maximum output
ES-145GI, MACT, NSPS	Diesel fuel-fired	600 kW maximum output
ES-146GI, MACT, NSPS	Diesel fuel-fired	500 kW maximum output
ES-147GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output
ES-148GI, MACT	Diesel fuel-fired	125 kW maximum output
ES-149GI, MACT, NSPS	Diesel fuel-fired	150 kW maximum output
ES-150GI, MACT	Diesel fuel-fired	200 kW maximum output
ES-152GI, MACT	Diesel fuel-fired	500 kW maximum output
ES-153GI, MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-154GI, MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-155GI, MACT, NSPS	Diesel fuel-fired	20 kW maximum output
ES-156GI, MACT, NSPS	Diesel fuel-fired	20 kW maximum output
ES-157GI, MACT, NSPS	Diesel fuel-fired	20 kW maximum output
ES-158GI, MACT, NSPS	Diesel fuel-fired	20 kW maximum output
ES-160GI, MACT, NSPS	Diesel fuel-fired	450 kW maximum output
ES-161GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output

ID Number	Source Description	Size of Generator
ES-162GI, MACT, NSPS	Diesel fuel-fired	150 kW maximum output
ES-163GI, MACT, NSPS	Diesel fuel-fired	150 kW maximum output
ES-164GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output
ES-165GI, MACT, NSPS	Diesel fuel-fired	75 kW maximum output
ES-181GI, MACT, NSPS	Diesel fuel-fired	42 kW maximum output
ES-182GI, MACT, NSPS	Diesel fuel-fired	60 kW maximum output
ES-183GI, MACT, NSPS	Diesel fuel-fired	125 kW maximum output
ES-184GI, MACT, NSPS	Diesel fuel-fired	400 kW maximum output
ES-185GI, MACT, NSPS	Diesel fuel-fired	42 kW maximum output
ES-186GI, MACT, NSPS	Diesel fuel-fired	35 kW maximum output
ES-187GI, MACT, NSPS	Diesel fuel-fired	400 kW maximum output
ES-188GI, MACT, NSPS	Diesel fuel-fired	60 kW maximum output
ES-189GI, MACT, NSPS	Diesel fuel-fired	80 kW maximum output
ES-16FPATF	Fire pump	157 hp
ES-01FPA2838	Fire pump	235 hp
ES-02FPH3838	Fire pump	60 hp
ES-03FPHH4983	Fire pump	188 hp
ES-04FPH6628	Fire pump	60 hp
ES-05FPP4543A	Fire pump	175 hp
ES-06FPP4543B	Fire pump	175 hp
ES-07FPP4543C	Fire pump	175 hp
ES-08FPP4543D	Fire pump	208 hp
ES-09FPR3065	Fire pump	350 hp
ES-10FPW3396	Fire pump	260 hp
ES-113FPO19RSA	Fire pump	90 hp
ES-12FPO19RSB	Fire pump	112 hp
ES-13FPO19F3	Fire pump	113 hp
ES-14FPF4706A	Fire pump	288 hp
ES-15FPF-4706B	Fire pump	288 hp
ES-17FPO19F2	Fire pump	54 kW, 72.4 hp
ES-18FPSAAF	Fire pump	228 kW
ES-19FPSAAF	Fire pump	228 kW
ES-20FPSAAF	Fire pump	228 kW
ES-21FPSAAF	Fire pump	228 kW
ES-TEMPGEN1500A MACT, NSPS	Diesel fuel/No. 2 fuel oil-fired	Up to 1500 kW, up to 2010 hp maximum output
ES-TEMPGEN1500B MACT, NSPS	Diesel fuel/No. 2 fuel oil-fired	Up to 1500 kW, up to 2010 hp maximum output
ES-TEMPGEN900A MACT, NSPS	Diesel fuel/No. 2 fuel oil-fired	Up to 900 kW, up to 1206 hp maximum output
ES-TEMPGEN900B MACT, NSPS	Diesel fuel/No. 2 fuel oil-fired	Up to 900 kW, up to 1206 hp maximum output
ES-190GI MACT, NSPS	Diesel fuel-fired	1000 kW maximum output
ES-191GI MACT, NSPS	Diesel fuel-fired	655 kW maximum output
ES-192GI MACT, NSPS	Diesel fuel-fired	655 kW maximum output
ES-193GI MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-194GI MACT, NSPS	Diesel fuel-fired	100 kW maximum output
ES-195GI MACT, NSPS	Diesel fuel-fired	200 kW maximum output

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
NMHC + NOx, HC, NOx, CO, PM	Purchase a certified engine from the manufacturer See Multiple Emissions Section 2.2	15A NCAC 2D .0524 40 CFR Part 60, Subpart IIII
Nitrogen dioxide	See Multiple Emissions Section 2.2	15A NCAC 2D .0530 PSD
HAPs	See Multiple Emissions Section 2.2 G	15A NCAC 2D .1111 40 CFR Part 63, Subpart ZZZZ
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)

1. 15A NCAC 2D .0516 "Sulfur Dioxide Emissions from Combustion Sources"

a. Emissions of sulfur dioxide from each emergency generator, peak shaver, or fire pump shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 L. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil or diesel fuel in any generator, peak shaver, or fire pump.

2. 15A NCAC 2D .0521"Control Of Visible Emissions"

a. Visible emissions from each of these engines shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 L. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of No. 2 fuel oil/diesel fuel in any engine.

M. One natural gas, No. 2 fuel oil-fired cogeneration turbine (60.32 million Btu per hour maximum heat input, 5.0 megawatt electrical output, NSPS Subpart GG, ID No. ES-33B) along with one heat recovery steam generation unit with supplemental heat (natural gas-fired, 61.2 million Btu per hour maximum heat input, NSPS Subpart Dc, ID No. ES-34B)

The following provides a summary of limits and/or standards for the emission source(s) described above

Regulated Pollutant	Limits/Standards	Applicable Regulation
Steam generation unit		
Particulate matter	0.19 lbs PM per million Btu per hour heat input	15A NCAC 2D .0503
Visible emissions	20 percent opacity (6-minute average) except for on 6-minute period per hour of not more than 27 percent opacity	15A NCAC 2D .0524 40 CFR Part 60, Subpart Dc
Sulfur dioxide	2.3 lbs per million Btu heat input	15A NCAC 2D .0516
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	Multiple Emissions Section 2.2 M	15A NCAC 2D .1109 CAA Case-by-Case MACT

The following provides a summary of limits and/or standards for the emission source(s) described above

Regulated Pollutant	Limits/Standards	Applicable Regulation
Turbine only		
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Sulfur dioxide	Fuel ≤ 0.8% sulfur by weight	15A NCAC 2D .0524 40 CFR Part 60, Subpart GG
Nitrogen dioxide	0.0189 % by volume @ 15% oxygen (gas) 0.0187 % by volume @ 15% oxygen (oil)	15A NCAC 2D .0524 40 CFR Part 60, Subpart GG
Turbine and Steam generation unit		
Nitrogen dioxide	Less than 75 tons per consecutive 12 month period See Multiple Emissions Section 2.2 A	15A NCAC 2Q .0317 of 2D .0530 PSD Avoidance
Toxic air pollutants	Exemptions Pollutant modeling	15A NCAC 2D .0702(18) 15A NCAC 2D .1100

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

---Steam Generation unit (ID No. ES-34B)---

a. Emissions of particulate matter from the combustion of natural gas, that are discharged from the steam generation unit (ID No. ES-34B) into the atmosphere, shall not exceed 0.19 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 M. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f), 40 CFR Part 60, Subpart Dc]

c. The Permittee shall record and maintain records of the amounts of natural gas burned during each month. The Permittee shall submit a summary report of the fuel records by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0524 : NSPS 40 CFR PART 60 SUBPART Dc – VISIBLE EMISSIONS

---Steam generation unit (ID No. ES-34B)---

a. Visible emissions from the steam generation unit (ID No. ES-34B) shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging more than 27 percent opacity
may occur not more than once in any hour nor more than four times per 24-hour period.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 M. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

c. **Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]
No monitoring, recordkeeping, or reporting for visible emissions is required when firing natural gas in the steam generation unit (ID No. ES-34B).

3. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION EQUIPMENT

----Steam Generation Unit (ID No. ES-34B)----

a. Emissions of sulfur dioxide from the natural gas-fired steam generation unit (ID No. ES-34B) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found

in Section 3. If the results of this test are above the limit given in Section 2.1 M. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

c. **Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]
The Permittee shall record and maintain records of the amounts of natural gas burned during each month. The Permittee shall submit a summary report of the fuel records by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

-----Turbine (ID No. ES-33B)------

a. Visible emissions from the turbine (ID No. ES-33B) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 M. 4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in turbine (ID No. 33B).

5. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART GG – SULFUR DIOXIDE

----Turbine (ID No. ES-33B---

a. The natural gas/No. 2 fuel oil-fired turbine (ES-33B) is subject to the sulfur dioxide requirements of 40 CFR Part 60, Subpart GG because it is a stationary gas turbine with a heat input greater than 10.7 gigajoules (10.14 million Btu per hour) that was built after October 3, 1977.

On or after the date on which the performance test required to be conducted by 40 CFR §60.8 is complete, the Permittee shall comply with the following condition:

i. No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

Testing [15A NCAC 2Q .0508(f), 40 CFR §60.335]

b. If emission testing is required, the testing shall be performed in accordance with 40 CFR §60.335 or an EPA approved alternative test method, and General Condition JJ. If the results of this test are above the limit given in Section 2.1 M. 5. a. i. above, the Permittee shall be deemed in noncompliance with the sulfur dioxide standard in 40 CFR Part 60, Subpart GG.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f), 40 CFR §60.334]

c. Turbine (ID No. ES-33B) receives No. 2 fuel oil from bulk storage tanks located on the military base. These tanks receive their supply from tank trucks. The monitoring requirements shall be as follows when firing No. 2 fuel oil in the turbine:
   i. The maximum sulfur content of any No. 2 fuel oil received at the site and burned in the turbine shall not exceed 0.8 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, Subpart GG if the sulfur content of the No. 2 fuel oil exceeds this limit.
   ii. To assure compliance, the Permittee shall monitor the sulfur content of the No. 2 fuel oil in accordance with any of the four options found in 40 CFR Part 75, Appendix D (i.e. daily sampling, flow proportional sampling, sampling from a unit's storage tank, or sampling each delivery). Sampling method shall be shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following information:
      (A) the name of the fuel oil supplier;
      (B) the maximum sulfur content of the fuel oil received during the quarter;
      (C) the method used to determine the maximum sulfur content of the fuel oil; and
      (D) A certified statement signed by the responsible official that the records of the fuel oil

sampling represents all of the No. 2 fuel oil fired during the time period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, Subpart GG if the sulfur content of the oil is not monitored and recorded.

d. The monitoring requirements shall be as follows when firing natural gas in the turbine: The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR Part 60, §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
   i. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
   ii. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

Notification [15A NCAC 2Q .0508(f)]

e. The Permittee shall comply with all applicable provisions, including notification requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524, "New Source Performance Standards"(NSPS) as promulgated in 40 CFR Part 60, Subpart GG, including Subpart A "General Conditions". The Permittee is required to NOTIFY the Regional Supervisor, Division of Air Quality, in WRITING, of the following:
   i. the date construction (40 CFR 60.7) of an affected facility is commenced, postmarked no later than 30 days after such date; and
   ii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

Reporting [15A NCAC 2Q .0508(f), 40 CFR §60.334]

f. Periods of excess emissions from any time period during which the sulfur content of the No. 2 fuel oil exceeds 0.8 percent by weight shall be reported to the DAQ.

g. The Permittee shall submit a summary report of the monitoring activities listed above by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 2D .0524: 40 CFR PART 60, SUBPART GG, STANDARDS FOR NITROGEN DIOXIDE

----Turbine (ID No. ES-33B)---

a. The natural gas/No. 2 fuel oil fired turbine (ID No. ES-33B) is subject to the nitrogen dioxide requirements of 40 CFR Part 60, Subpart GG because it is a stationary gas turbine with a heat input greater than 10.7 gigajoules (10.14 million Btu per hour) and was built after October 3, 1977.

The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart GG, including Subpart A "General Provisions."
On or after the date on which the performance test required to be conducted by 40 CFR §60.8 is complete, the Permittee shall not cause any gases to be discharged into the atmosphere that contain nitrogen dioxide in excess of:
   i. 0.0189 percent by volume @15 percent oxygen and on a dry basis when burning natural gas, and
   ii. 0.0187 percent by volume @15 percent oxygen and on a dry basis when burning No. 2 fuel oil.

Testing [15A NCAC 2Q .0508(f), 40 CFR §60.335]

b. An initial performance test shall be performed for nitrogen dioxide emissions. During the initial performance test to determine the fuel consumption necessary to comply with the allowable NOx emissions as calculated in 40 CFR §60.332, the Permittee shall establish four data points (NOx emission rates) at 30%, 50%, 75% and 90% - 100% of peak load or at four points in the normal operating range of the gas turbine

All loads shall be corrected to ISO conditions (standard day conditions, 58.73 °F, 14.7 psi) using the appropriate equations supplied by the manufacturer.

i. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR 60, Appendix A.
ii. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and reporting requirements.
iii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the initial start-up of the affected facility, the Permittee shall conduct the required performance test(s) and submit a written report of the test(s) to the Regional Supervisor, DAQ.
iv. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
v. All associated testing costs are the responsibility of the Permittee.

Notification Requirement [15A NCAC 2Q .0508(f)]

c. The Permittee shall comply with all applicable provisions, including notification requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524, "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60, Subpart GG, including Subpart A "General Conditions". The Permittee is required to NOTIFY the Regional Supervisor, Division of Air Quality, in WRITING, of the following:
   i. the date construction (40 CFR 60.7) of an affected facility is commenced, postmarked no later than 30 days after such date; and
   ii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date. If emissions testing is required, the testing shall be performed in accordance with 40 CFR §60.335 or an EPA approved alternative method. If the results of this test are above the applicable limit(s) given Subpart GG, the Permittee shall be deemed in noncompliance with the nitrogen dioxide and sulfur dioxide standard(s) of 40 CFR Part 60, Subpart GG.

Monitoring [15A NCAC 2Q .0508(f), 40 CFR §60.334]

d. Turbine (ID No. ES-33B) burns No. 2 fuel oil that it receives from bulk storage tanks located on the military base. These tanks receive their supply from tank trucks.

In accordance with the July 8, 2004 amendment to 40 CFR Part 60, Subpart GG "Standards of Performance f or Stationary Gas Turbines; Final Rule", sources are required to monitor the nitrogen content of the fuel being fired in the turbine only if they claim the allowance for fuel-bound nitrogen. For sources that do not seek to use the fuel-bound nitrogen credit, sampling to determine the daily fuel nitrogen concentrations is not required.

Reporting [15A NCAC 2Q .0508(f), 40 CFR §60.334]

e. The Permittee shall submit a summary report of the monitoring activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

N. Three dry filter-type paint spray booths (ES-01C, ES-02C, and ES-08C), one dry filter-type paint spray booth (ES-09C) using non-reactive water reducible Chemical Agent Resistant Coatings only along with natural gas-fired bake ovens

The following provides a summary of limits and/or standards for the emission sources described above

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	See Multiple Emission Section 2.2	15A NCAC 2D .0958
Particulate matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in ton/hour	15A NCAC 2D .0515
Visible emissions	20 percent opacity	15A NCAC 2D .0521

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	Pollutant modeling	15A NCAC 2Q .0711 15A NCAC 2D .1100

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in Section 3 of this Permit. If the results of this test are above the limit given in Section 2.1 N. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall maintain records which specify the types of materials and finishes processed and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the records are not maintained or the types of materials and finishes are not monitored.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

d. Particulate matter emissions from the paint spray booths (ID Nos. ES-01C, ES-02C, ES-08C, and ES-09C) shall be controlled by fabric filters. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and fabric filters are not inspected and maintained.

e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the fabric filters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the fabric filters within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each spray booth (ES-01C, ES-02C, ES-08C, and ES-09C) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In

no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 N. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month when the spray booth is in operation, the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 N. 2. a. above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

O. One dry filter-type paint spray booth (ID No. ES-10C, MACT Subpart GG), using epoxy primer and Chemical Agent Resistant Coating (CARC), with one natural gas-fired make up air heater (3.3 million Btu per hour maximum heat input, ID No. ES-10H), controlled by one natural gas-fired thermal oxidizer (1.2 million Btu per hour maximum heat input, ID No. CD-10C), Building P-3354.

One dry filter-type paint spray booth (ID No. ES-12C, MACT Subpart GG) with HVLP application located at Simmons Army Air Field

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in ton/hour	15A NCAC 2D .0515
Volatile organic compounds	See Multiple Emission Section 2.2	15A NCAC 2D .0958
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)
HAPs	See Multiple Emission Section 2.2 F.	15A NCAC 2D .1111 40 CFR Part 63, Subpart GG

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in Section 3 of this Permit. If the results of this test are above the limit given in Section 2.1 O. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall maintain records that specify the types of materials and finishes processed and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the records are not maintained or the types of materials and finishes are not monitored.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

d. Particulate matter emissions from the paint spray booth (ID No. ES-12C) shall be controlled by fabric filters. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the fabric filter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and fabric filter are not inspected and maintained.

e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the fabric filters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the fabric filter within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from spray booths (ES-10C and ES-12C) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 O. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month when the spray booth is in operation, the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission points of the emission source

is below the limit given in Section 2.1 O. 2. a. above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

P. Two diesel vehicle engine test stands (ES-01E and ES-02E) located at the Material Maintenance Division

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 P. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of diesel fuel in any test stand.

Q. One paper pulverizer (maximum 2000 lbs per hour input, ES-01P) with associated bagfilter (612 square feet of surface area)

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable particulate emission rate (lbs/hr) P = process weight rate in ton/hour	15A NCAC 2D .0515
Visible emissions	20 percent opacity	15A NCAC 2D .0521

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated

by the following equation: [15A NCAC 2D .0515(a)]

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in Section 3 of this Permit. If the results of this test are above the limit given in Section 2.1 Q. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from the paper pulverizer shall be controlled by a bagfilter system. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the filter system's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and filter system are not inspected and maintained.

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the capture and filter system; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the capture and filter system within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the paper pulverizer (ES-01P) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 Q. 2. a. above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of each source for any visible emissions above normal. The Permittee shall establish "normal" for the source in the first 30 days following permit issuance. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 Q. 2. a. above in this section. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and

made available to an authorized representative upon request. The logbook shall record the following:
i. the date and time of each action;
ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
iii. the results of any corrective actions performed.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

R. Plasma Arc Cutter (ES-01PC) with a cartridge filter dust collector (CD-01PC) located in Building O-190-R61

The following provides a summary of limits and/or standards for the emission sources described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour Liquid and gaseous fuels and combustion air are not considered as part of the process weight	15A NCAC 2D .0515
Visible emissions	20 percent opacity	15A NCAC 2D .0521

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in Section 3 of this Permit. If the results of this test are above the limit given in Section 2.1 R. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from the plasma arc cutter shall be controlled by a cartridge dust filter system. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
ii. an annual (for each 12 month period following the initial inspection) internal inspection of the filter system's structural integrity.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and filter system are not inspected and maintained.

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
i. the date and time of each recorded action;

ii. the results of each inspection;
iii. the results of any maintenance performed on the capture and filter system; and
iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the capture and filter system within 30 days of a written request by the DAQ.
f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the plasma arc cutter (ES-01PC) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 R. 2. a. above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of each source for any visible emissions above normal. The Permittee shall establish "normal" for the source in the first 30 days following permit issuance. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 R. a. above in this section. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

S. Tank Cleaning and Purging System with direct propane-fired contact water heater (5.0 mmBtu per hour heat input, ES-01TP)

The following provides a summary of limits and/or standards for the emission sources described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 lbs per million Btu heat input each boiler	15A NCAC 2D .0516
Visible emissions	20 percent opacity each boiler	15A NCAC 2D .0521

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the purging system (ES-01TP) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 S. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

c. **Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]
No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of propane in this system.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the purging system (ES-01TP) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with and General Condition JJ. If the results of this test are above the limit given in Section 2.1 S. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting for visible emissions is required when firing propane gas in this system.

2.2 Multiple Emission Sources Specific Limitations and Conditions

A. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION--- Nitrogen Dioxide--

1. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, the turbine/steam generation unit cogeneration system (ID Nos. ES-33B & 34B), shall discharge into the atmosphere less than 75 tons of nitrogen dioxide per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

2. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ found in Section 3 of this permit. If the results of this test are above the limit given in Section 2.2 A. 1. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

3. The Permittee shall keep monthly records of the amount of natural gas and No. 2 fuel oil used, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the fuels are not monitored.
4. The use of fuels in the turbine/steam generation unit cogeneration system (ID Nos. ES-33B & 34B) shall be limited such that nitrogen dioxide emissions shall not exceed 75 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula for the firing of No. 2 fuel oil and natural gas in the turbine/steam generation unit cogeneration system:

$$A = \left[\left(B_{\substack{steam\,unit \\ nat\,gas}} \times \frac{6.12\,lbs\,NOx}{hour}\right) + \left(C_{\substack{turbine \\ nat\,gas}} \times \frac{3.97\,lbs\,NOx}{hour}\right) + \left(D_{\substack{turbine \\ No.2\ oil}} \times \frac{16.4\ lbs\,NOx}{hour}\right) \right] \times \frac{tons\,NOx}{2000\,lbs\,NOx}$$

Where: A = total emissions of nitrogen dioxide (tons/month)
B = total hours of operation per each month burning natural gas in the steam generation unit
C = total hours of operation per month burning natural gas in the turbine
D = total hours of operation per month burning No. 2 fuel oil in the turbine
6.12 lbs NOx/hr (vendor supplied emission factor for steam generation unit firing natural gas)

3.97 lbs NOx/hr (initial performance test values for turbine firing natural gas)
16.4 lbs NOx/hr (initial performance test values for turbine firing No. 2 fuel oil)

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records are not kept, and/or if the total nitrogen dioxide emissions from the turbine/steam generation unit cogeneration system (ID Nos. ES-33B & 34B) exceed 75 tons per consecutive 12-month period.

Reporting [15A NCAC 2Q .0508(f)]

5. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month time period between July and December, July 30 of each calendar year for the preceding six-month time period January and June. The report shall contain the following:
   i. The monthly nitrogen dioxide emissions for the previous 12 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and used No. 2 fuel oil consumed for the previous 17 months.

B. **Emergency Generator Reporting Requirement**

By January 31 and July 31 of each year, the following shall be reported to the Regional Supervisor, Division of Air Quality:

The Permittee shall submit a certification to the DAQ Regional Office stating that the emergency generator on-site listing has been updated and is available to the DAQ upon request. The on-site listing shall include an ID number, the location (building), the capacity (kilowatts), and the type of fuel combusted.

C. 15A NCAC 2D. 0958: WORK PRACTICE STANDARDS FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS – Paint spray booths and paint mix room
ES-01C – paint spray booth
ES-02C – paint spray booth
ES-08C – paint spray booth
ES-09C – paint spray booth (using CARC paint only)
ES-10C – paint spray booth
ES-12C – paint spray booth

1. This Rule applies to all facilities that use volatile organic compounds as solvents, carriers, material processing media, or industrial chemical reactants, or in other similar uses or that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions.
   a. The owner operator of any source subject to this Rule shall:
      i. Store all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
      ii. clean up spills within 30 minutes,
      iii. store wipe rags in closed containers,
      iv. not clean sponges, fabric, wood, paper products, and other absorbent materials,
      ii. drain solvents used to clean supply lines and other painting equipment into closable containers and close containers immediately after each use,
      vi. clean mixing, blending, and manufacturing vats and containers by adding cleaning solvent, closing the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be poured into a closed container,
   b. When cleaning parts, the owner or operator of any source subject to this Rule shall:
      i. flush parts in the freeboard area,
      ii. take all reasonable precautions to reduce the pooling of solvent on and in the parts,
      iii. tilt or rotate parts to drain as much solvent as possible and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
      iv. not fill cleaning machines above the fill line,
      v. not agitate solvent to the point of causing splashing,

   c. When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 15A NCAC 2D .0958.

D. Facility wide emissions

1. 15A NCAC 2Q .0711: EMISSION RATES REQUIRING A PERMIT – State Enforceable Only
   Pursuant to 15A NCAC 2Q .0711, for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the "Emission Rates Requiring A Permit" listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed toxic air pollutant(s) from the facility, including fugitive emissions, will not exceed the emission rates requiring a permit specified in 15A NCAC 2Q .0711.
   a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding toxic emission rate.
   b. PRIOR to exceeding any of these listed toxic emission rates, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D.1100.
   c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the toxic air pollutant emissions do not exceed the emission rates as listed below:

Emission Rate Limitations				
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Xylene (1330-20-7)		57		16.4
Toluene (108-88-3)		98		14.4
MIK (108-10-1)		52		7.6
MEK (78-93-3)		78		22.4

Ethyl Acetate (141-78-6)	36

d. When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 15A NCAC 2D .0711.

E. 15A NCAC 2D .0530 [40 CFR 51.166 (Prevention of Significant Deterioration)]

For "Prevention of Significant Deterioration" for nitrogen oxides, peak shaving generator (ES-17PSG, 2700 kW) shall be operated such that total nitrogen dioxide emissions shall be less than 40.0 tons per consecutive twelve months.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

1. Nitrogen dioxide emissions from the peak shaving operation shall be calculated on a monthly basis. The Permittee shall keep monthly records of the hours of operation for the generator when used in peak shaver mode. The monthly records shall be kept in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the hours of operation are not recorded. The monthly calculation shall be performed using the following equation:

$$A = 2700\,kW \times \frac{1.341\,hp}{kW} \times (B)\,\frac{lbs\,NO_x}{hp-hr} \times (C)\,\frac{hrs}{month} \times \frac{1\,ton\,NOx}{2000\,lbs\,NO_x}$$

Where A = Nitrogen dioxide emissions (tons/month)
B = AP-42 emission factor (2.4E-02 lbs NOx/hp-hr)
C = Number of hours of operation in peak shaver mode for the month

Reporting [15A NCAC 2Q .0508(f)]

2. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities within 30 days after each calendar year six month time period postmarked on or before January 30 of each calendar year for the preceding six month period between July 30 and December 30, July 30 of each calendar year for the preceding six month period between January and June The report shall contain the following:
   a. The monthly nitrogen dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   b. All instances of deviations from the requirements of this permit must be clearly identified.

F. 40 CFR Part 63, Subpart GG: NATIONAL EMISSIONS STANDARDS FOR AEROSPACE MANUFACTURING AND REWORK FACILITIES - (When Using Non Specialty Coatings)

- One dry filter-type paint spray booth (ID No. ES-10C) located at Building P-3354
- One dry filter-type paint spray booth (ID No. ES-12C) located at Building P-3354

The Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111 "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart GG, including Subpart A "General Provisions when using nonspecialty coatings."

Summary of Subpart GG or 40 CFR Part 63 –National Emission Standards For Aerospace Manufacturing and Rework Facilities

Cleaning Operations:	
Standards	1. Must comply with the following requirements unless the cleaning solvent use is identified in Table 1 below or contains HAP and VOC below the de minimis levels specified in §63.741 (f). [63.744(a)] Table 1 [40 CFR §63.744] Aqueous------Cleaning solvents in which water is the primary ingredient (80 percent of cleaning solvent solution as applied must be water). Detergents surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than 93 °C 200 °F)(as reported by the manufacturer)

	and the solution must be miscible with water. Hydrocarbon based----Cleaners that are composed of photochemically reactive hydrocarbons and oxygenated hydrocarbons and have a maximum vapor pressure 7 mm Hg at 20 ^{o}C (3.75 in. H_2O at 68 ^{o}F). These cleaners also contain no HAP. 2. Place cleaning solvent-laden cloth, paper, or other absorbent applicators in bags or other closed containers upon completing their use. [63.744(a)(1)] 3. Store cleaning solvents except semi-aqueous in closed containers. [63.744(a)(2)]

	Handwipe 1. Except for cleaning of spray gun equipment, all hand wipe cleaning solvent must meet a composition requirement as listed in 58xcee 1 (40 CFR §63.744) as listed above, have a composite vapor pressure 45 mm Hg at 20 ^{o}C, or meet the 60 percent volume reduction requirements specified in an alternative compliance plan. [63.744(b)] 2. Note the list of 13 cleaning operations exempt from composition, vapor pressure, and volume reduction requirements. [63.744(e)]
	Spray Gun Cleaning 1. Use one of the four specified techniques or their equivalent. [63.744(c)] 2. For enclosed spray gun cleaners, if leaks are found during the required monthly inspection, repair as soon as practicable, but within 15 days. [63,744(c)(1)(ii)] 3. If cleaning solvent solutions that contain HAP and VOC below the de minimis levels are used, those cleaning operations using such solutions are exempt from requirements. [63.744(c)]
Standards	Flush Cleaning Operating procedures specify emptying used cleaning solvent into enclosed container, collection system, or system with equivalent emission control. [63.744(d)]
Test Methods and Procedures	Handwipe 1. Composition determination using manufacture's data. [63.750(a)] 2. Vapor pressure determination using readily available sources such as MSDS if single component; composite vapor pressure determined by manufacturer's supplied data or ASTM E 2260-911 and by equation provided for multiple component solvents. [63.750(b)]
	Spray Gun Cleaning Flush Cleaning None None
Monitoring	Handwipe Spray Gun Cleaning Flush Cleaning None Monthly visual leak inspection None [63.751(a)]
Recordkeeping	Handwipe 1. If complying with composition requirements, the name, data/calculations, and annual volumes. [63.752 (b)(2)] 2. If complying with vapor pressure limit, the name, vapor pressure, data/calculations/tests results, and monthly volumes. [63.752 (b)(4)] 3. For noncompliant cleaning solvents used in exempt operations, the name, monthly volumes by operation, and master list of processes. [63.752(b)(4)]
	Spray Gun Cleaning Record all leaks, including source identification and dates leaks found and repaired. [63.752(b)(5)
	Flush Cleaning For semi-aqueous cleaning solvents, the name, data/calculations, and annual volumes. [63.752(b)(2)]
Reporting	Handwipe 1. Semi-annual report: Statement certifying compliance by responsible official. [63.753(b)(1)(v)] 2. Statement that noncompliant cleaning solvents used. [63.753(b)(1)(i)] 3. New cleaning solvents and their composite vapor pressure or notification of compliance with composition requirements. [63.753(b)(1)(ii)]

When a national security emergency occurs, the resulting surge conditions shall not be considered in determining

compliance 40 CFR Part 63, Subpart GG.

Summary of Subpart GG or 40 CFR Part 63 –National Emission Standards For Aerospace Manufacturing and Rework Facilities

Cleaning Operations: (Continued)	
	Spray Gun Cleaning 1. Semi-annual report: Statement certifying compliance by responsible official. [63.753(b)(1)(v)] 2. Statement that noncompliant spray gun cleaning method used. [63.753(b)(1)(iii)] 3. Leaks from enclosed spray gun cleaners not repaired within 15 days. [63.753(b)(1)(iv)
Primer and Topcoat Application Operations	
Standards	<u>Uncontrolled Primers</u> 1. Organic HAP and VOC content Limit: 350 grams per liter (g/L)(2.9 lb/gal less water for HAP; and less water and exempt solvents for VOC) as applied. [63.745(c)(1-2)] 2. Achieve compliance through: (1) using coatings below content limits, or (2) using monthly volume-weighted averaging to meet content limits. [63.745(e)] <u>Uncontrolled Topcoats</u> (including self-priming tools) 3. Organic HAP and VOC content limit: 420 g/L (3.5 lb/gal less water for HAP; and less water and exempt solvents for VOC) as applied. [63.745(c)(3-4)] 4. Achieve compliance through: (1) using coatings below content limits, or (2) using monthly volume-weighted averaging to meet content limits. [63.745(e)] <u>Controlled Primers and Topcoats</u> (including self-priming tools) 5. Control system must reduce organic HAP and VOC emissions to the atmosphere 81 percent, using capture and destruction/removal efficiencies. [63.745(d) <u>All Primers and Topcoats</u> 6. Minimize spills during handling and transfer. [63.745 (b)] 7. Specific application techniques must be used. [63.745(f)(1)] 8. Exemptions from specific application techniques must be used for certain situations. [63.7459f)(3)] 9. All application equipment must be operated according to manufacturer's specifications, company procedures, or locally specified operating procedures (whichever is most stringent). [63.745(f)(2)] 10. Operating requirements for the application of primers or topcoats that contain inorganic HAP, including control with either particulate filters (see Tables 1 through 4 of 63.745) or waterwash system. Painting operation(s) must be shutdown if operated outside manufacturer's specified limits. [63.745(g)(1) through (3)] 11. Exemptions from operating requirements for the application of primers or topcoats that contain inorganic HAP, including control with either particulate filters or waterwash system. Provided for certain application operations. [63.745(g)(4)]
Performance Test Periods and Tests	<u>Uncontrolled</u> 1. Performance test period for coatings not averaged: each 24 hour period; for "averaged"coatings each 30-day period. [63.749(d)(1)] <u>Controlled</u> 2. Performance test period for noncarbon adsorber: three 1-hour runs; for carbon adsorber: each rolling material balance period. [63.749(d)(1)] 3. Initial performance test required for all control devices to demonstrate compliance with overall control efficiency requirement. [63.749(d)(2)]

When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 40 CFR Part 63, Subpart GG.

Primer and Topcoat Application Operations (Continued)	
Tests Methods and Procedures	Organic HAP 1. Organic HAP level determination procedures. [63.750(c) and (d)] 2. VOC level determination procedures. [63.750(e) and (f)] 3. Overall control efficiency of carbon adsorber system determined using provided procedures; for other control devices, determine capture efficiency and destruction efficiency. For capture efficiency, use procedure T in Appendix B to 40 CFR 52.741 for total enclosures and 40 CFR 52.741(a)(4)(iii) procedures for all other enclosures. [63.750(g) and (h)] 3. For alternative application methods, first determine emission levels for initial 30-day period or five aircraft using only HVLP or electrostatic, or a time period specified by the permitting agency. Then use alternative application method for period of time necessary to coat equivalent amount of parts with same coatings. Alternative application method may be used when emissions generated during the test period are less than or equal to the emissions generated during the initial 30-day period or live aircraft. Dried film thickness must be within specification for initial 30-day period or five aircraft as demonstrated under actual production conditions. [63.750(i)] Inorganic HAP 4. Dry particulate filter certification; use Method 319 to meet or exceed the efficiency data points in Tables 1 and 2 of §63.745 for existing sources, or Tables 3 and 4 of §63.745 for new sources [63.750 (o)]
Monitoring	1. Carbon adsorbers. [63.751(1)(b) through (7)] 2. Temperature monitoring equipment to be installed, calibrated, maintained, and operated according to manufacturer's specifications. Use CEMS as an alternative. [63.751(b)(8)] 3. Incinerators. [63.751(b)(9) through (12)] 4. Dry particulate filters and waterwash systems. [63.751(c)] 5. Alternate monitoring method. [63.751(c)]
Recordkeeping	1. Name and VOC content as received and as applied for all primers and topcoats. [63.752(c)(1)] Uncontrolled 2. For "compliant" coatings, organic HAP and VOC contents as applied, data/calculations and test results used to determine HAP/VOC contents (H_i and G_ii), and monthly usage. [63.752(c)(2)] 3. For "low-HAP content" primers, annual purchase records, and data/calculations and test results used to determine H_i or HAP/VOC content as applied. [63.752(c)(3)] 4. For "averaged" coatings, monthly volume-weighted average values of HAP/VOC content (H_a and G_a), and data/calculations and test results used to calculate H_a and G_a. [63.752(c)(4)]

When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 40 CFR Part 63, Subpart GG.

Summary of Subpart GG or 40 CFR Part 63 –National Emission Standards For Aerospace Manufacturing and Rework Facilities

Primer and Topcoat Application Operations (Continued)	
Recordkeeping (Continued)	Controlled 1. For incinerators, overall control efficiency test results/data/calculations used in determining the overall control efficiency; and continuous records of incinerator temperature(s). [63.752(c)(5)] 2. For carbon adsorbers, overall control efficiency and length of rolling period and all supporting test results/data/calculations used in determining the overall control

	efficiency. [63.752(c)(6)] Inorganic HAP Particulate 3. Pressure drop across filter or water flow rate through waterwash system once per shift, and acceptable limits. [63.752(d)(1) through (3)]
Reporting	Semiannual (six months from the date of notification of compliance status) 1. All instances where organic HAP/VOC limits were 61xceeded. [63.753(c)(1)(i) and (ii)] 2. Control device exceedances (out-of-compliance). [63.753(c)(1)(iii), (iv), and (v)] 3. Periods when operation not immediately shut down when the pressure drop or water flow rate was outside limits. [63.753(c)(1)(vi)] 4. Statement certifying compliance. [63.753(c)(1)(vii)] Annual (twelve months from the date of notification of compliance status) 5. Number of times the pressure drop or water flow rate limits were exceeded. [63.753(c)(2)]
Depainting Operations	
Exemptions	1. Facilities depainting six or less completed aerospace vehicles per calendar year. [63.746(a)] 2. Depainting of parts or units normally removed from the plane for depainting (except wings and stabilizers). [63.746(a)(1)] 3. Aerospace vehicles or components intended for public display, no longer operational, and not easily capable of being moved. [63.746(a)(2)] 4. Depainting of radomes and parts, subassemblies, and assemblies normally removed from the primary aircraft before depainting. [63.746(a)(3)]
Standards	1. Zero organic HAP emissions from chemical strippers or softeners. [63.746(b)(1)] 2. Minimize inorganic HAP emissions when equipment malfunctions. [63.746(b)(2)] 3. Facility (average) allowance for spot stripping and decal removal; 26 gallons of strippers or 190 pounds of HAP per commercial aircraft per year; and 50 gallons of strippers or 365 pounds of HAP per military aircraft per year. [63.746(b)(3)] 3. Follow operating requirements for depainting operations generating airborne inorganic HAP. [63.746(b)(4)] 5. Mechanical and hand sanding are exempt from requirements of §63.746(b)(4). [63.746(b)(5)] 6. Control HAP emissions at 81 percent efficiency for systems installed before effective date (September 1, 1995), and 95 percent efficiency for newer systems. [63.746(c)]

When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 40 CFR Part 63, Subpart GG.

Summary of Subpart GG or 40 CFR Part 63 –National Emission Standards For Aerospace Manufacturing and Rework Facilities

Depainting Operations (Continued)	
Performance Test Periods and Tests	Organic HAP 1. Initial performance test of all control of all control devices is required to demonstrate compliance with overall control efficiency requirement. [63.749(f)(1), (f)(2), and (f)(3)] 2. Performance Test Period for noncarbon adsorber, three 1-hour test runs; for carbon adsorber each rolling material balance period. [63.749(f)(1)] 3. Test period for spot stripping and decal removal usage limits: each calendar year. [63.749(f)(1)] Inorganic HAP 4. Operating requirements specified in § [63.746(b)(4)], [63.749(g)]
Test Methods and Procedures	Organic HAP 1. Overall control efficiency of carbon adsorber system may be determined using

	specified procedures and equations 9 through 14; for other control devices, must determine capture and destruction efficiencies (use equations 15 through 18 to calculate overall control efficiency). For capture efficiency, use Procedure T in Appendix B to 40 CFR 52.741 for total enclosures and 40 CFR 52.741(a)(4)(iii) procedures for all other enclosures. [63.750(g) and (h)] 2. Spot stripping and decal removal: Procedures are provided for determining volume of chemical strippers (equation 20) or weight of organic HAP used per aircraft (equation 21). [63.750(j)] <u>Inorganic HAP</u> 3. Dry particulate filter certification: use Method 319 to meet or exceed the efficiency data points in Tables 1 and 2 of §63.745 for existing sources or Tables 3 and 4 of §63.745 for new sources. [63.750(o)]
Monitoring	Continuously monitor the pressure drop across filters, or the water flow rate through the waterwash system and read and record the pressure drop, or the water flow rate for waterwash system, once per shift. [63.751(d)]
Recordkeeping	1. Name and monthly volumes of each chemical stripper used or monthly weight of organic HAP used in chemical strippers. [63.752(e)(1)] 2. For controlled chemical strippers (carbon adsorber), overall control efficiency and length of rolling period and all supporting test results/data/calculations; certification of the accuracy of the device. [63.752(e)(2)] 3. For controlled chemical strippers (other control devices), overall control efficiency and supporting test results/data/calculations. [63.752(e)(3)] 4. List of parts/assemblies normally removed. [63.752(e)(4)] 5. For nonchemical based equipment, name and type, and malfunction information including dates, description, and alternative methods used. [63.752(e)(5)] 6. For spot stripping and decal removal, volume of stripper or weight or organic HAP used, annual number of aircraft stripped, annual average volume or weight per aircraft, and all data/calculations used to calculate volume or weight per aircraft. [63.752(e)(6)] 7. Pressure drop across filter or the visual continuity of the water curtain and water flow rate for waterwash systems, once per shift and include acceptable limits. [63.752(e)(7)

When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 40 CFR Part 63, Subpart GG.

Summary of Subpart GG or 40 CFR Part 63 –National Emission Standards For Aerospace Manufacturing and Rework Facilities

Depainting Operations (Continued)	
Reporting	<u>Semiannual</u> (6 months from the date of notification of compliance status) 1. 24-hour periods where organic HAP were emitted from depainting operations. [63.753(d)(1)(I)] 2. New/reformulated chemical strippers and HAP contents. [63.753(d)(1)(ii),(iii), and (iv)] 3. New nonchemical depainting techniques. [63.753(d)(1)(v)] 4. Malfunction information or nonchemical depainting techniques including dates, description, and alternative methods used. [63.753(d)(1)(vi)] 5. Periods when operation not immediately shut down when the pressure drop or water flow rate was outside limits. [63.753(d)(1)(vii)] 6. List of new/discontinued aircraft models and, for new models, list of parts normally removed for depainting. [63.753(d)(1)(viii)] 7. Organic HAP control device exceedances. [63.753(d)(3)] 8. Statement certifying compliance. [63.753(d)(1)(ix)] <u>Annual</u> (12 months from the date of notification of compliance status) 9. Exceedances of average annual volume or weight allowance for spot stripping and decal removal. [63.753(d)(2)(I)] 10. Number of times the pressure drop or water flow rate limits were exceeded.

	[63.753(d)(2)(ii)]
Maskant Operations	
Standards	Minimize spills during handling and transfer [63.747(b)] Uncontrolled Maskants 1. Organic HAP emissions: ≤622 g/l (5.2 lb/gal) (less water) as applied for Type I; ≤ 160 g/L (1.3 lb/gal) (less water) as applied for Type II. [63.747(c)(1)] 2. VOC emissions: ≤622 g/l (5.2 lb/gal) (less water and exempt solvents) as applied for Type I, ≤ 160 g/L (1.3 lb/gal) (less water and exempt solvents) as applied for Type II. [63.747(c)(2)] 3. Exemption for touch-up of scratched surfaces, damaged maskant, and trimmed edges. [63.747(c)(3)] 4. Comply by either: (1) using maskants below content limits, or (2) using monthly volume-weighted averaging provisions described in §63.743(d). [63.747(e)] Controlled Maskants 5. If control device is used, system must capture and control all emissions from maskant operation and must achieve an overall control efficiency of at least 81.%. [63.747(d)]
Performance Test Periods and Tests	Uncontrolled 1. Performance Test Period for maskants that are not averaged, each 24-hour period; for maskants that are averaged, each 30-day period (unless otherwise specified). [63.749(h)(1)] Controlled 2. Performance Test Period for noncarbon adsorber, three 1-hour test runs; for carbon adsorber, each rolling material balance period. [63.749(h)(1)] 3. Initial performance test required for all control devices to demonstrate compliance with overall control efficiency requirement. [63.749(h)(2)]

When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 40 CFR Part 63, Subpart GG.

Summary of Subpart GG or 40 CFR Part 63 –National Emission Standards For Aerospace Manufacturing and Rework Facilities

Maskant Operations (Continued)	
Test Methods and Procedures	1. Organic HAP level determination procedures. [63.750(k) and (l)] 2. VOC level determination procedures. [63.750(m) and (n)] 3. Overall control efficiency of carbon adsorber system determined using specified procedures and equations 9 through 14; for other control devices, determine capture and destruction efficiencies (use equations 15 through 18 to calculate overall control efficiency). For capture efficiency, use Procedure T in Appendix B to 40 CFR 52.741 for total enclosures and 40 CFR 52.741(a)(4)(iii) procedures for all other enclosures. [63.750(g) and (h)]
Monitoring	1. Incinerators and carbon adsorbers: temperature sensors with continuous recorders for incinerators; and install, calibrate, maintain, and operate temperature monitors according to manufacturer's specifications. Use CEMS as an alternative. [63.751(b)]
Recordkeeping	Uncontrolled Maskants 1. For maskants not averaged, mass of organic HAP and VOC emitted per unit volume of chemical milling maskant (less water for HAP; and less water and exempt solvents for VOC) (H_i and G_i); all data, calculations, and test results; monthly volumes of each maskant. [63.752(f)(1)] 2. For "averaged" maskants, monthly volume-weighted average mass of organic HAP or VOC emitted per unit volume of chemical milling maskant as applied (less water for HAP; and less water and exempt solvents for VOC) (H_a and G_a); all data, calculations, and test results. [63.752(f)(2)]

	Controlled Maskants 3. For carbon adsorbers, overall control efficiency and length of rolling period and all supporting test results/data/calculations used in determining the overall control efficiency; certification of the accuracy of the device that measures the amount of HAP or VOC recovered. [63.752(f)(3)] 4. For incinerators, overall control efficiency; test results, data, and calculations used in determining the overall control efficiency; length of rolling material balance period with data and calculations; record of certification of the accuracy of the device that measures amount of HAP or VOC recovered; or record of carbon replacement time for nonregenerative carbon adsorbers; and incinerator temperature(s). [63.752(f)(4)]
Reporting	Semiannual (6 months from the date of notification of compliance status) 1. Exceedances or organic HAP/VOC limits. [63.753(e)(1) and (2)] 2. Control device exceedances (out of compliance). [63.753(e)(3)] 3. New maskants. [63.753(e)(4)] 4. New control devices. [63.753(e)(5)] 5. Statement certifying compliance. [63.753(e)(6)]

When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 40 CFR Part 63, Subpart GG.

G. 15A NCAC 2D .1111, 40 CFR Part 63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Sulfur dioxide	Burn fuel that contains less than 15 parts per million sulfur content	15A NCAC 2D .0524 40 CFR Part 60 Subpart IIII
Hazardous Air Pollutants	See Sections Below for engine size and description	15A NCAC 2D .1111 40 CFR Part 63, Subpart ZZZZ
NMHC + NOx, HC, NOx, CO, PM	See Sections Below for engine size and description	15A NCAC 2D .0524 40 CFR Part 60 Subpart IIII
Toxic air pollutants	Exemptions	15A NCAC 2Q.0702(a)(27)

1. **Existing Emergency CI RICE ≤ 500 bhp** [40 CFR 63.6585, 63.6590(a)(1)(ii)]
   The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-74G	≤ 500 bhp (201)	Existing	< 12 June 2006	Emg.	Must comply with work practice standards and operating limits by May 3, 2013.
ES-36GI	≤ 500 bhp (107)	Existing	< 12 June 2006	Emg.	
ES-49GI	≤ 500 bhp (60)	Existing	< 12 June 2006	Emg.	
ES-90GI	≤ 500 bhp (268)	Existing	< 12 June 2006	Emg.	
ES-91GI	≤ 500 bhp (107)	Existing	< 12 June 2006	Emg.	
ES-101GI	≤ 500 bhp (168)	Existing	< 12 June 2006	Emg.	
ES-105GI	≤ 500 bhp (134)	Existing	< 12 June 2006	Emg.	
ES-113GI	≤ 500 bhp (10)	Existing	< 12 June 2006	Emg.	
ES-116GI	≤ 500 bhp (34)	Existing	< 12 June 2006	Emg.	
ES-117GI	≤ 500 bhp (34)	Existing	< 12 June 2006	Emg.	
ES-118GI	≤ 500 bhp (34)	Existing	< 12 June 2006	Emg.	
ES-120GI	≤ 500 bhp (67)	Existing	< 12 June 2006	Emg.	
ES-121GI	≤ 500 bhp (67)	Existing	< 12 June 2006	Emg.	
ES-122GI	≤ 500 bhp (67)	Existing	< 12 June 2006	Emg.	
ES-124GI	≤ 500 bhp (80)	Existing	< 12 June 2006	Emg.	
ES-127GI	≤ 500 bhp (134)	Existing	< 12 June 2006	Emg.	

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-132GI	≤ 500 bhp (201)	Existing	< 12 June 2006	Emg.	
ES-140GI	≤ 500 bhp (369)	Existing	< 12 June 2006	Emg.	
ES-150GI	≤ 500 bhp (268)	Existing	< 12 June 2006	Emg.	
ES-01PSG	≤ 500 bhp (308)	Existing	< 12 June 2006	Emg.	
ES-02PSG	≤ 500 bhp (335)	Existing	< 12 June 2006	Emg.	
ES-03PSG	≤ 500 bhp (469)	Existing	< 12 June 2006	Emg.	
ES-05PSG	≤ 500 bhp (469)	Existing	< 12 June 2006	Emg.	
ES-06PSG	≤ 500 bhp (469)	Existing	< 12 June 2006	Emg.	

Applicability Date [40 CFR 63.6595(a)(1)]

a. The Permittee shall comply with the applicable requirements no later than May 3, 2013.

Notifications [40 CFR 63.6645(a)(5)]

b. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ.

Operating and Maintenance Requirements [15A NCAC 2Q .0508(b)]

d. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603(a). 63.6625(h)]

e. Except during periods of startup of the IC engine, the Permittee shall:
   i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
   ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
   iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary [40 CFR 63.6603(a)]

f. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in condition f. [40 CFR 63.6603(a), 63.6625(i)]

g. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in condition f., or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603(a)]

h. The Permittee shall be in compliance with the emission limitations and operating limitations in this subpart that apply at all times. [40 CFR 63.6605(a)]

i. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

j. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6]

k. In order for the engine to be considered an emergency stationary RICE under this condition, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3)

below, is prohibited.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) The Permittee may emergency stationary RICE for any combination of the purposes specified in paragraphs (i) through (iii) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) below counts as part of the 100 hours per calendar year allowed by this paragraph (2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.

The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP– 002–3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2) above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)]

Monitoring [15A NCAC 2Q .0508(f)]

l. The Permittee shall install a non-resettable hour meter on the IC engine if one is not already installed. [40 CFR 63.6625(f)]

Recordkeeping [15A NCAC 2Q .0508(f)]

m. The Permittee shall keep the following:

i. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]

iii. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]

iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition j., including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]

v. Records required to show continuous compliance with each operating and maintenance requirement in conditions d through o. [40 CFR 63.6655(d) and (e)]

vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in (l)(2)(ii) or (iii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]

n. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)(b)(c)]

Reporting [15A NCAC 2Q .0508(f)]

o. The Permittee shall submit a semi-annual compliance report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. [40 CFR 63.6550(a), (b)(5)]

p. The compliance report shall contain:
   i. Company name and address. [40 CFR 63.6650(c)(1)]
   ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR 63.6650(c)(2)]
   iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.6650(c)(3)]
   iv. If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction. [40 CFR 63.6650(c)(4)]
   v. If there are no instances of noncompliance with any emission or operating limitations that apply to you, a statement that there were no instances of noncompliance with the emission or operating limitations during the reporting period. [40 CFR 63.6650(c)(5)]
   vi. Instances of noncompliance with the emission and operating limitations.[40 CFR 63.6640(b)]
   vii. Instances in which the requirements in Table 8 to this subpart that apply were not met. [40 CFR 63.6640(e)]

q. For each instance of noncompliance from an emission or operating limitation that occurs for a stationary RICE where you are not using the CMS (hour meter) to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in 40 CFR §6650(d)and (f)] along with the following:
   i. The total operating time of the stationary RICE at which the instance of noncompliance occurred during the reporting period.
   ii. Information on the number, duration, and cause of instances of noncompliance (including unknown cause, if applicable), as applicable, and the corrective action taken.

r. For each instance of noncompliance from an emission or operating limitation occurring for a stationary RICE where you are using the CMS (hour meter) to comply with the emission and operating limitations in this subpart, the compliance report must contain the information in condition (b)(i)-(iv) and the following information:
   i. The date and time that each malfunction started and stopped. [40 CFR 63.6650(e)(1)]
   ii. The date, time, and duration that each CMS was inoperative. [40 CFR 63.6650(e)(2)]
   iii. The date and time that each instance of noncompliance started and stopped, and whether each instance of noncompliance occurred during a period of malfunction or during another period. [40 CFR 63.6650(e)(4)]
   iv. A summary of the total duration of the instance of noncompliance during the reporting period, and the total duration as a percent of the total source operating time during that reporting period. [40 CFR 63.6650(e)(5)]
   v. A breakdown of the total duration of the instances of noncompliance during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. [40 CFR 63.6650(e)(6)]
   vi. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period. [40 CFR 63.6650(e)(7)]
   vii. A brief description of the stationary RICE. [40 CFR 63.6650(e)(9)]
   viii. A brief description of the CMS. [40 CFR 63.6650(e)(10)]
   ix. A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.6650(e)(12)]

s. All instances of noncompliance must also be reported as described in General Condition I. [40 CFR 63.6650(f)]

t. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in condition (m)(2)(ii) and (iii), the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 63.6650(h)]

2. **Non-Emergency CI RICE > 500 bhp** [40 CFR §63.6600, §63.6612, and §63.6640]
The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 2D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-17PSG	> 500 bhp (3621)	New	> December 2002	Non-Emg.	

a. **Emission Limit Requirements**
Reduce CO emissions by 70%

b. **Operating Limit Requirements** (except during startup)
If using an oxidation catalyst: Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100% load ± 10% from the pressure drop across the catalyst measured during the initial performance test. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is $450 \leq x \leq 1350$ degrees F. Comply with any operating limitations approved by the Administrator.

c. **Testing Requirements**
Must perform an initial compliance test. Must conduct the initial performance test or other initial compliance demonstrations in accordance with Tables 4 of Subpart ZZZZ that apply within 180 days after the compliance date.
- Subsequent performance tests must be conducted every 8,760 hrs or 3 years, whichever comes first.

d. Continuous Compliance Requirements:
If complying by reducing CO emissions and using a oxidation catalyst, and using a CPMS:
- Conduct semiannual performance tests for CO to demonstrate the required CO percent reduction is achieved; and
- Install a CPMS and collect the catalyst inlet temperature data according to §63.6625(b);
- Reduce these data points to 4-hour rolling averages; and
- Maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
- Measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across is within the operating limitation established during the performance test.
- If changing the catalyst, reestablish the values of the operating parameters by conducting a performance test to demonstrate that you are meeting the required emission limits.

e. Reporting/Recordkeeping Requirements:
Submit a semi-annual compliance report. The report must contain:
- If there are no deviations from any emission or operating limitations, a statement that there were no deviations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out of control as specified in 63.8(c)(7), a statement that there were not periods during which the CMS was out of control during the reporting period; or
- If the owner had a deviation from any emission or operating limitations during the reporting period, include the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS was out of control, as specified in §63.8(c)(7), the information in §63,6650(e); or
- If the owner had a malfunction during the reporting period include the information in 63.6650(c)(4).

Keep records of the following:
- A copy of each notification and report that is submitted to comply with Subpart ZZZZ,
- The occurrence and duration of each malfunction of the unit and records of corrective actions taken during periods of malfunction to minimize emissions.
- Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- Maintenance conducted on the stationary RICE in order to demonstrate that the owner operated and maintained the stationary RICE according to own maintenance plan.

- Records of action taken during periods of malfunction to minimize emissions, including corrective action.
- Records of the hours of operation that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency operation. If the engine is used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records must be in a suitable form and be readily available for expeditious review. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if required monitoring, recordkeeping, and reporting are not performed.

3. **Emergency/Non Emergency RICE ≤ 500 bhp With Limited Requirements [40 CFR §63.6590(c)(6)]** The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-45G	≤ 500 bhp (469)	New	≥ 12 June 2006	Emg.	Compliant by meeting the requirements of 40 CFR Part 60 Subpart IIII (CI).
ES-73G	≤ 500 bhp (402)	New	≥ 12 June 2006	Emg.	
ES-75G	≤ 500 bhp (201)	New	≥ 12 June 2006	Emg.	
ES-85G	≤ 500 bhp (201)	New	≥ 12 June 2006	Emg.	
ES-74GI	≤ 500 bhp (34)	New	≥ 12 June 2006	Emg.	
ES-75GI	≤ 500 bhp (34)	New	≥ 12 June 2006	Emg.	
ES-77GI	≤ 500 bhp (34)	New	≥ 12 June 2006	Emg.	Compliant by meeting the requirements of 40 CFR Part 60 Subpart IIII (CI).
ES-83GI	≤ 500 bhp (168)	New	≥ 12 June 2006	Emg.	
ES-84GI	≤ 500 bhp (168)	New	≥ 12 June 2006	Emg.	
ES-85GI	≤ 500 bhp (168)	New	≥ 12 June 2006	Emg.	
ES-86GI	≤ 500 bhp (168)	New	≥ 12 June 2006	Emg.	
ES-87GI	≤ 500 bhp (469)	New	≥ 12 June 2006	Emg.	
ES-88GI	≤ 500 bhp (241)	New	≥ 12 June 2006	Emg.	
ES-89GI	≤ 500 bhp (268)	New	≥ 12 June 2006	Emg.	
ES-93GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-94GI	≤ 500 bhp (335)	New	≥ 12 June 2006	Emg.	
ES-95GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-96GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-97GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-100GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-108GI	≤ 500 bhp (107)	New	≥ 12 June 2006	Emg.	
ES-109GI	≤ 500 bhp (107)	New	≥ 12 June 2006	Emg.	
ES-112GI	≤ 500 bhp (20)	New	≥ 12 June 2006	Emg.	
ES-129GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-133GI	≤ 500 bhp (201)	New	≥ 12 June 2006	Emg.	
ES-144GI	≤ 500 bhp (201)	New	≥ 12 June 2006	Emg.	
ES-147GI	≤ 500 bhp (168)	New	≥ 12 June 2006	Emg.	
ES-148GI	≤ 500 bhp (168)	New	≥ 12 June 2006	Emg.	
ES-149GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-153GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-154GI	≤ 500 bhp (134)	New	≥ 12 June 2006	Emg.	
ES-155GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-156GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-157GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-158GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-160GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-161GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-162GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-163GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-164GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-165GI	≤ 500 bhp (27)	New	≥ 12 June 2006	Emg.	
ES-181GI	≤ 500 bhp (56.3)	New	≥ 12 June 2006	Emg.	
ES-182GI	≤ 500 bhp (80.5)	New	≥ 12 June 2006	Emg.	
ES-183GI	≤ 500 bhp (168)	New	≥ 12 June 2006	Emg.	
ES-185GI	≤ 500 bhp (56)	New	≥ 12 June 2006	Emg.	
ES-186GI	≤ 500 bhp (47)	New	≥ 12 June 2006	Emg.	
ES-188GI	≤ 500 bhp (80)	New	≥ 12 June 2006	Emg.	
ES-189GI	≤ 500 bhp (107)	New	≥ 12 June 2006	Emg.	
ES-193GI	≤ 500 bhp (162)	New	≥ 12 June 2006	Emg.	
ES-194GI	≤ 500 bhp (162)	New	≥ 12 June 2006	Emg.	
ES-195GI	≤ 500 bhp (	New	≥ 12 June 2006	Emg.	
ES-196GI	≤ 500 bhp (100)	New	≥ 12 June 2006	Emg.	
ES-197GI	≤ 500 bhp (100)	New	≥ 12 June 2006	Emg.	
ES-01FPA2838	≤ 500 bhp (235)	New	≥ 12 June 2006	Fire pump	
ES-02FPH3838	≤ 500 bhp (60)	New	≥ 12 June 2006	Fire pump	
ES-03FPHH4983	≤ 500 bhp (188)	New	≥ 12 June 2006	Fire pump	
ES-04FPH6628	≤ 500 bhp (60)	New	≥ 12 June 2006	Fire pump	
ES-05FP P4543A	≤ 500 bhp (175)	New	≥ 12 June 2006	Fire pump	
ES-06FP P4543B	≤ 500 bhp (175)	New	≥ 12 June 2006	Fire pump	
ES-07FP P4543C	≤ 500 bhp (175)	New	≥ 12 June 2006	Fire pump	
ES-08FP P4543D	≤ 500 bhp (208)	New	≥ 12 June 2006	Fire pump	
ES-09FPR3065	≤ 500 bhp (350)	New	≥ 12 June 2006	Fire pump	
ES-10FPW3396	≤ 500 bhp (260)	New	≥ 12 June 2006	Fire pump	
ES-113FPO19RSA	≤ 500 bhp (90)	New	≥ 12 June 2006	Fire pump	
ES-12FPO19RSB	≤ 500 bhp (112)	New	≥ 12 June 2006	Fire pump	
ES-13FPO19F3	≤ 500 bhp (113)	New	≥ 12 June 2006	Fire pump	
ES-14FPF4706A	≤ 500 bhp (288)	New	≥ 12 June 2006	Fire pump	
ES-15FPF4706B	≤ 500 bhp (288)	New	≥ 12 June 2006	Fire pump	
ES-16FPATF	≤ 500 bhp (157)	New	≥ 12 June 2006	Fire pump	
ES-17FPO19F2	≤ 500 bhp (72.4)	New	≥ 12 June 2006	Fire pump	
ES-18FPSAAF	≤ 500 bhp	New	≥ 12 June 2006	Fire pump	
ES-19FPSAAF	≤ 500 bhp	New	≥ 12 June 2006	Fire pump	
ES-20FPSAAF	≤ 500 bhp	New	≥ 12 June 2006	Fire pump	

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-21FPSAAF	≤ 500 bhp	New	≥ 12 June 2006	Fire pump	

If the requirements listed above in this Section are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

4. Emergency RICE > 500 bhp With Limited Requirements [40 CFR §63.6590(b)]

The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-04PSG	> 500 bhp (670)	Existing	< 19 Dec. 2002	Emg.	Do not have to meet the requirements of Subpart ZZZZ and Subpart A of this Part except for the initial notification requirements of §63.6645(f)
ES-07PSG	> 500 bhp (536)	Existing	< 19 Dec. 2002	Emg.	
ES-08PSG	> 500 bhp (536)	Existing	< 19 Dec. 2002	Emg.	
ES-10PSG	> 500 bhp (1710)	Existing	< 19 Dec. 2002	Emg.	
ES-16PSG	> 500 bhp (2012)	Existing	< 19 Dec. 2002	Emg.	
ES-24G	> 500 bhp (1710)	Existing	< 19 Dec. 2002	Emg.	
ES-25G	> 500 bhp (1710)	Existing	< 19 Dec. 2002	Emg.	
ES-26G	> 500 bhp (1710)	Existing	< 19 Dec. 2002	Emg.	
ES-104GI	> 500 bhp (671)	Existing	< 19 Dec. 2002	Emg.	
ES-141GI	> 500 bhp (671)	Existing	< 19 Dec. 2002	Emg.	
ES-33G	> 500 bhp (2347)	New	≥ 19 Dec. 2002	Emg.	
ES-37G	> 500 bhp (1676)	New	≥ 19 Dec. 2002	Emg.	
ES-38G	> 500 bhp (805)	New	≥ 19 Dec. 2002	Emg.	Do not have to meet the requirements of Subpart ZZZZ and Subpart A of this Part except for the initial notification requirements of §63.6645(f)
ES-41G	> 500 bhp (1341)	New	≥ 19 Dec. 2002	Emg.	
ES-42G	> 500 bhp (1341)	New	≥ 19 Dec. 2002	Emg.	
ES-43G	> 500 bhp (1006)	New	≥ 19 Dec. 2002	Emg.	
ES-44G	> 500 bhp (671)	New	≥ 19 Dec. 2002	Emg.	
ES-46G	> 500 bhp (610)	New	≥ 19 Dec. 2002	Emg.	
ES-80G	> 500 bhp (4157)	New	≥ 19 Dec. 2002	Emg.	
ES-81G	> 500 bhp (4157)	New	≥ 19 Dec. 2002	Emg.	
ES-82G	> 500 bhp (4157)	New	≥ 19 Dec. 2002	Emg.	
ES-83G	> 500 bhp (3353)	New	≥ 19 Dec. 2002	Emg.	
ES-84G	> 500 bhp (1073)	New	≥ 19 Dec. 2002	Emg.	
ES-86G	> 500 bhp (1073)	New	≥ 19 Dec. 2002	Emg.	
ES-87G	> 500 bhp (1073)	New	≥ 19 Dec. 2002	Emg.	
ES-88G	> 500 bhp (1006)	New	≥ 19 Dec. 2002	Emg.	
ES-89G	> 500 bhp (2682)	New	≥ 19 Dec. 2002	Emg.	
ES-90G	> 500 bhp (2682)	New	≥ 19 Dec. 2002	Emg.	
ES-91G	> 500 bhp (2682)	New	≥ 19 Dec. 2002	Emg.	
ES-92G	> 500 bhp (2682)	New	≥ 19 Dec. 2002	Emg.	
ES-93G	> 500 bhp (2682)	New	≥ 19 Dec. 2002	Emg.	
ES-94G	> 500 bhp (2682)	New	≥ 19 Dec. 2002	Emg.	
ES-95G	> 500 bhp (1649)	New	≥ 19 Dec. 2002	Emg.	
ES-96G	> 500 bhp (1649)	New	≥ 19 Dec. 2002	Emg.	
ES-97G	> 500 bhp (1649)	New	≥ 19 Dec. 2002	Emg.	
ES-98G	> 500 bhp (1341)	New	≥ 19 Dec. 2002	Emg.	
ES-99G	> 500 bhp (1649)	New	≥ 19 Dec. 2002	Emg.	
ES-100G	> 500 bhp (1006)	New	≥ 19 Dec. 2002	Emg.	
ES-101GI	> 500 bhp (1649)	New	≥ 19 Dec. 2002	Emg.	
ES-102GI	> 500 bhp (536)	New	≥ 19 Dec. 2002	Emg.	
ES-106GI	> 500 bhp (557)	New	≥ 19 Dec. 2002	Emg.	
ES-110GI	> 500 bhp (805)	New	≥ 19 Dec. 2002	Emg.	
ES-142GI	> 500 bhp (805)	New	≥ 19 Dec. 2002	Emg.	
ES-145GI	> 500 bhp (805)	New	≥ 19 Dec. 2002	Emg.	
ES-152GI	> 500 bhp (671)	New	≥ 19 Dec. 2002	Emg.	
ES-146GI	> 500 bhp (671)	New	≥ 19 Dec. 2002	Emg.	

Permit ID	Hp Rating	Class		Mode	Subpart ZZZZ Requirements
ES-184GI	> 500 bhp (536)	New	≥ 19 Dec. 2002	Emg.	
ES-187GI	> 500 bhp (536)	New	≥ 19 Dec. 2002	Emg.	
ES-190GI	>500 bhp (1,490)	New	≥ 19 Dec. 2002	Emg.	
ES-191GI	>500 bhp (891)	New	≥ 19 Dec. 2002	Emg.	
ES-192GI	>500 bhp (891)	New	≥ 19 Dec. 2002	Emg.	
ES-198GI	>500 bhp (600)	New	≥ 19 Dec. 2002	Emg.	

a. Requirements for New Compression Ignition Emergency Stationary RICE (greater than 500 hp) Located at a Major Source - [40 CFR §63.6645]

Initial notification shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

- The name and address of the owner or operator;
- The address (i.e., physical location) of the affected source;
- An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
- A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and
- A statement of whether the affected source is a major source or an area source.

b. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the monitoring, recordkeeping, and reporting requirements for the generators is not followed.

H. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – NITROGEN DIOXIDE

1. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, temporary boiler (ES-TEMPBOIL), and temporary emergency generators (ES-TEMPGEN1500A, ES-TEMP GEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B) shall emit to the atmosphere less than 40 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

2. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 H. 1., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

3. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.

4. The use of fuel in temporary boiler (ES-TEMPBOIL) shall be limited such that the total nitrogen dioxide emissions from the temporary boiler and the emergency generators shall not exceed 40 tons for any consecutive 12-month period. Calculations for the temporary boiler shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$Boiler\,NOx = \left[\{ \frac{A\ ft^3}{month} \times EF_{nat\ gas} (\frac{lbs\ NOx}{ft^3}) \} + \{ \frac{B\ gallons\ fuel\ oil}{month} \times EF_{fuel\ oil} (\frac{lbs\ NOx}{1000\ gallons}) \} \right] \times \frac{1\ ton\ NOx}{2000\ lbs\ NOx}$$

Where: Boiler NOx = total emissions of nitrogen dioxide (tons/month)
A = total cubic feet of natural gas burned in the boiler in one specific month
B = total gallons of No. 2 fuel oil burned in the boiler in one specific month
Emission Factor (nat. gas) = AP-42 factor or vendor factor (lbs NOx/10^6 ft^3)
Emission Factor (No. 2 f.o.) = AP-42 factor or vendor factor (lbs NOx/1000 gallon)

Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according

to the following formula for the firing of No. 2 fuel oil, and/or diesel fuel in each of the temporary emergency generators in operation during any specific month. The following is a sample calculation:

$$Generator NOx = \left[\frac{C\ hours}{month} \times EF_{No.2\ fuel\ oil\ or\ diesel\ fuel} \left(\frac{lbs\ NOx}{hp-hour} \right) \times D\ (hp) \right] \times \frac{1\ ton\ NOx}{2000 lbs\ NOx}$$

Where:

Emergency generator NOx = total emissions of nitrogen dioxide (tons/month)
C = Number of operation hours per month
D = Engine rating (hp)
Emission Factor = AP-42 factor (for small or large engine) or vendor factor (lbs NOx per hp-hour)

This formula will be used for each of the individual emergency engines and the results added to the results of the emissions from the boiler in each month.

The monthly NOx emissions (tons NOx) shall be added together for the boiler and all of the temporary generators in operation during the month and compared to the 40 ton per year NOx limit on a consecutive 12 month period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records are not kept, and/or if the total nitrogen dioxide emissions from the four temporary emergency generators and the temporary boiler exceed 40 tons per consecutive 12-month period.

Reporting [15A NCAC 2Q .0508(f)]

5. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   a. The monthly NOx emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
   b. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months

I. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – NITROGEN DIOXIDE

1. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, boilers (ID Nos. ES-44B, ES-45B, and ES-46B) shall emit to the atmosphere less than 50 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

2. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 I. 1. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

3. The Permittee shall keep monthly records of the amount of No. 2 fuel oil and/or natural gas in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if fuel usage is not monitored.
4. The use of No. 2 fuel oil and/or natural gas boilers (ES-44B, 45B, and 46B) shall be limited such that the total nitrogen dioxide emissions from the boilers shall not exceed 50 tons for any consecutive 12-month period. Calculations for the boilers shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$\sum NOx\ (tons/month) =$$

$$\left\langle \left[\frac{(A+B+C)\ gallons\ No.2\ f.o.}{month} \times \frac{20\ lbs.\ NOx}{1000\ gal.\ f.o.} \right] + \left[\frac{(D+E+F)}{month} \times \frac{50\ lbs\ NOx}{1 \times 10^6\ scf} \right] \right\rangle \times \frac{1\ ton\ NOx}{2000 lbs\ NOx}$$

A = monthly usage (gallons/month) of No. 2 fuel oil in boiler ES-44B
B = monthly usage (gallons/month) of No. 2 fuel oil in boiler ES-45B
C = monthly usage (gallons/month) of No. 2 fuel oil in boiler ES-46B
D = monthly usage (10^6 scf natural gas/month) of natural gas in boiler ES-44B
E = monthly usage (10^6 scf natural gas/month) of natural gas in boiler ES-45B
F = monthly usage (10^6 scf natural gas/month) of natural gas in boiler ES-46B
Emission factor natural gas (AP-42) = 50 lbs NOx/10^6 scf
Emission factor No. 2 fuel oil (AP-42) = 20 lbs NOx/1000 gallons No. 2 fuel oil

Where: Boiler NOx = total emissions of nitrogen dioxide (tons/month)
A + B + C = total gallons of No. 2 fuel oil burned in the boiler in one specific month
D + E + F = total cubic feet of natural gas burned in the boiler in one specific month
Emission Factor (natural gas) = AP-42 factor (lbs NOx/10^6 ft^3)
Emission Factor (No. 2 f.o.) = AP-42 factor (lbs NOx/1000 gallon)

Reporting [15A NCAC 2Q .0508(f)]

5. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   a. The monthly NOx emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
   b. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months.

J. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – NITROGEN DIOXIDE

1. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, emergency generators (ID Nos. ES-80G, 81G, 82G, 83G, 84G, 85G, 86G) and boilers (ES-FORSCOM1, 2, and 3) shall emit to the atmosphere less than 39.59 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

2. If emission testing is required, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ. If the results of this test are above the limit given in Section 2.2 J. 1., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

3. The Permittee shall keep monthly records of the number of hours of operation of emergency generators (ID Nos. ES-80G, 81G, 82G, 83G, 84G, 85G, 86G) and the amount of fuel burned in boilers (FORSCOM1, 2, and 3) in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the hours of operation are not monitored and recorded.
4. The usage of the emergency generators (ES-80G, 81G, 82G, 83G, 84G, 85G, 86G) and No. 2 fuel oil/natural gas-fired boilers (ES-FORSCOM1, 2, and 3) shall be limited such that the total nitrogen dioxide emissions from the generators and boilers shall not exceed 39.59 tons for any consecutive 12-month period. Calculations for the generators shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formulas:

$\sum NOx(tons/month)$ from emergency generator engines (ES-80G, 81G, 82G, 83G, 84G, 85G, 86G) and boilers (ES-FORSCOM1, 2, & 3) shall be less than 39.59 tons NOx per consecutive 12-month period.

$$\left\langle \left[\frac{(A)\ gal.\ No.2\ f.o.}{month} \times \frac{20\ lbs\ NOx}{1000\ gal.\ f.o.} \right] + \left[\frac{(B)}{month} \times \frac{100\ lbs\ NOx}{10^6\ scf.\ nat.\ gas} \right] \right\rangle \times \frac{1\ ton\ NOx}{2000\ lbs\ NOx}$$

Where: A = total monthly gallons of No. 2 fuel oil burned in boilers (FORSCOM1, 2, and 3)

B = total monthly scf of natural gas burned in boilers (FORSCOM1, 2, and 3)
AP-42 Emission factor for No. 2 fuel oil = 20 lbs NOx/1000 gallons of fuel oil
AP-42 Emission factor for natural gas = 100 lbs NOx/10^6 scf

Plus:

$$\left\langle \left[\frac{6.9\ g\ NOx}{Hp-hr} \times C\ (Hp) \times \frac{1\ lb\ NOx}{453.59\ g\ NOx} \times \frac{(D)\ hours\ operation}{month} \right] \right\rangle \times \frac{1\ ton\ NOx}{2000\ lbs\ NOx}$$ (For each generator)

Where: C = horse power rating of each individual engine
D = monthly hours of operation of each individual engine
Emission factor for diesel fuel fired emergency generator = 6.9 g NOx/Hp hour (NSPS allowable)

Reporting [15A NCAC 2Q .0508 (f)]

5. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   a. The monthly NOx emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
   b. The monthly hours of operation for each emergency generator for the previous 17 months.

K. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – NITROGEN DIOXIDE

1. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, generators (ES-91G, ES-92G, ES-93G, and ES-94G) shall emit to the atmosphere less than 39.61 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

2. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 K. 1. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

3. The Permittee shall keep monthly records of the amount of total hours of operation for each of the four Diesel fuel-fired emergency generators. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if fuel usage is not monitored.
4. Calculations for the generators shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

The total hours of operation without exceeding the PSD Avoidance condition is 1980 hours per consecutive 12-month period using the NSPS allowable emissions limit for NOx.

$$\sum hours\ of\ operation [A + B + C + D] \leq 1980\ hours\ per\ consecutive\ twelve\ months$$

A = hours of operation for ES-91G
B = hours of operation for ES-92G
C = hours of operation for ES-93G
D = hours of operation for ES-94G

Reporting [15A NCAC 2Q .0508(f)]

5. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each

calendar year for the preceding six-month period between January and June. The report shall contain the following:

a. The monthly hours of operation for the previous 17 months. The hours of operation shall be calculated for each of the 12-month periods over the previous 17 months.

L. 15A NCAC 2D .0524: NSPS, STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES [40 CFR 60 SUBPART IIII], (For units manufactured after April 1, 2006)

- ES-41G (diesel-fired emergency generator, 1000 kW)
- ES-42G (diesel-fired emergency generator, 1000 kW)
- ES-43G (diesel-fired emergency generator, 750 kW)
- ES-44G (diesel-fired emergency generator, 500 kW)
- ES-45G (diesel-fired emergency generator, 350 kW)
- ES-46G (diesel-fired emergency generator, 455 kW)
- ES-73G (diesel-fired emergency generator, 300 kW)
- ES-74GI (diesel-fired emergency generator, 25 kW)
- ES-75G (diesel-fired emergency generator, 175 kW)
- ES-75GI (diesel-fired emergency generator, 25 kW)
- ES-77GI (diesel-fired emergency generator, 25 kW)
- ES-80G (diesel-fired emergency generator, 3100 kW)
- ES-81G (diesel-fired emergency generator, 3100 kW)
- ES-82G (diesel-fired emergency generator, 3100 kW)
- ES-83G (diesel-fired emergency generator, 2500 kW)
- ES-83GI (diesel-fired emergency generator, 125 kW)
- ES-84G (diesel-fired emergency generator, 800 kW)
- ES-84GI (diesel-fired emergency generator, 25 kW)
- ES-85G (diesel-fired emergency generator, 150 kW)
- ES-85GI (diesel-fired emergency generator, 125 kW)
- ES-86G (diesel-fired emergency generator, 800 kW)
- ES-86GI (diesel-fired emergency generator, 125 kW)
- ES-87G (diesel-fired emergency generator, 900 kW)
- ES-87GI (diesel-fired emergency generator, 350 kW)
- ES-88G (diesel-fired emergency generator, 750 kW)
- ES-88GI (diesel-fired emergency generator, 180 kW)
- ES-89G (diesel-fired emergency generator, 2000 kW)
- ES-89GI (diesel-fired emergency generator, 200 kW)
- ES-90G (diesel-fired emergency generator, 2000 kW)
- ES-90GI (diesel-fired emergency generator, 200 kW)
- ES-91G (diesel-fired emergency generator, 2000 kW)
- ES-92G (diesel-fired emergency generator, 2000 kW)
- ES-93G (diesel-fired emergency generator, 2000 kW)
- ES-93GI (diesel-fired emergency generator, 100 kW)
- ES-94G (diesel-fired emergency generator, 2000 kW)
- ES-94GI (diesel-fired emergency generator, 250 kW)
- ES-95G (diesel-fired emergency generator, 1230 kW)
- ES-95GI (diesel-fired emergency generator, 100 kW)
- ES-96G (diesel-fired emergency generator, 1230 kW)
- ES-96GI (diesel-fired emergency generator, 100 kW)
- ES-97G (diesel-fired emergency generator, 1230 kW)
- ES-97GI (diesel-fired emergency generator, 100 kW)
- ES-98G (diesel-fired emergency generator, 1000 kW)
- ES-99G (diesel-fired emergency generator, 1250 kW)
- ES-100G (diesel-fired emergency generator, 750 kW)
- ES-100GI (diesel-fired emergency generator, 100 kW)
- ES-101G (diesel-fired emergency generator, 1230 kW)
- ES-108GI (diesel-fired emergency generator, 80 kW)
- ES-109GI (diesel-fired emergency generator, 80 kW)
- ES-110GI (diesel-fired emergency generator, 600 kW)
- ES-112GI (diesel-fired emergency generator, 25 kW)

- ES-129GI (diesel-fired emergency generator, 100 kW)
- ES-133GI (diesel-fired emergency generator, 150 kW)
- ES-144GI (diesel-fired emergency generator, 150 kW)
- ES-145GI (diesel-fired emergency generator, 600 kW)
- ES-146GI (diesel-fired emergency generator, 500 kW)
- ES-147GI (diesel-fired emergency generator, 127 kW)
- ES-149GI (diesel-fired emergency generator, 150 kW)
- ES-153GI (diesel-fired emergency generator, 100 kW)
- ES-154GI (diesel-fired emergency generator, 100 kW)
- ES-155GI (diesel-fired emergency generator, 20 kW)
- ES-156GI (diesel-fired emergency generator, 20 kW)
- ES-157GI (diesel-fired emergency generator, 20 kW)
- ES-158GI (diesel-fired emergency generator, 20 kW)
- ES-160GI (diesel-fired emergency generator, 450 kW)
- ES-161GI (diesel-fired emergency generator, 125 kW)
- ES-162GI (diesel-fired emergency generator, 150 kW)
- ES-163GI (diesel-fired emergency generator, 150 kW)
- ES-164GI (diesel-fired emergency generator, 125 kW)
- ES-165GI (diesel-fired emergency generator, 75 kW)
- ES-181GI (diesel-fired emergency generator, 42 kW)
- ES-182GI (diesel-fired emergency generator, 60 kW)
- ES-183GI (diesel-fired emergency generator, 125 kW)
- ES-184GI (diesel-fired emergency generator, 400 kW)
- ES-185GI (diesel-fired emergency generator, 42 kW)
- ES-186GI (diesel-fired emergency generator, 35 kW)
- ES-187GI (diesel-fired emergency generator, 400 kW)
- ES-188GI (diesel-fired emergency generator, 60 kW)
- ES-189GI (diesel-fired emergency generator, 80 kW)
- ES-190GI (diesel-fired emergency generator, 1,000 kW)
- ES-191GI (diesel-fired emergency generator, 655 kW)
- ES-192GI (diesel-fired emergency generator, 655 kW)
- ES-193GI (diesel-fired emergency generator, 100 kW)
- ES-194GI (diesel-fired emergency generator, 100 kW)
- ES-195GI (diesel-fired emergency generator, 200kW)
- ES-196GI (diesel-fired emergency generator, 100kW)
- ES-197GI (diesel-fired emergency generator, 100kW)
- ES-198GI (diesel-fired emergency generator, 600kW)
- ES-TEMPGEN1500A (diesel-fired emergency generator, up to 1500 kW)
- ES-TEMPGEN1500B (diesel-fired emergency generator, 1500 kW)
- ES-TEMPGEN900A (diesel-fired emergency generator, 900 kW)
- ES-TEMPGEN900B (diesel-fired emergency generator, 900 kW)
- ES-03FPHH4983 (fire pump, 140 kW)
- ES-05FPP4543A (fire pump, 175 hp, 130 kW)
- ES-06FPP4543B (fire pump, 175 hp, 130 kW)
- ES-07FPP4543C (fire pump, 175 hp, 130 kW)
- ES-13FPO19F3 (fire pump, 113 hp, 84 kW)
- ES-14FPF4706A (fire pump, 288 hp)
- ES-15FPF4706B (fire pump, 288 hp)
- ES-16FPATF (fire pump, 117 kW, 157 hp)
- ES-17FPO19F2 (fire pump, 54 kW, 72.4 hp)
- ES-18FPSAAF (fire pump, 228 kW)
- ES-19FPSAAF (fire pump, 228kW)
- ES-20FPSAAF (fire pump, 228 kW)
- ES-21FPSAAF (fire pump, 228 kW)

1. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, including Subpart A "General Provisions."

[15A NCAC 2D .0524]

Emission Standards

2. The Permittee shall comply with the following emission standards for compression ignition (CI) engines for model year 2007 and later.

   Purchase an engine certified to the emission standards in §60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

3. The Permittee shall use diesel fuel in the CI engine of each emergency generator with a sulfur content of less than 15 ppm beginning October 1, 2010. [§60.4207, and §80.510(a) and (b)]

Testing [15A NCAC 2Q .0508(f)]

4. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 L. 2 and 3. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Monitoring [15A NCAC 2Q .0508(f)]

5. Owners and operators of CI internal combustion engines (ICE) must operate and maintain stationary CI ICE that achieve the emissions standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. The Permittee may only change engine settings that are permitted by the manufacturer. The Permittee shall also meet the requirements of 40 CFR §89, 94 and/or 1068 as applicable. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the requirements in this Section are not met. [§60.4206 and §60.4211(a)]
6. The CI emergency generator shall be equipped with a non-resettable hour meter prior to startup. If the CI engine of each emergency generator is not equipped with a non-resettable hour meter prior to startup, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524. [§60.4209(a)]
7. The Permittee may operate the CI emergency generator for maintenance checks and readiness testing for up to 100 hours per year provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Operation during an actual emergency shall not be subject to a limit on hours. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Because the Permittee is required to comply with emission standards under §60.4205 for the CI engine in the emergency generator, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the requirements in this Section are not met. [§60.4211(e)]

Recordkeeping [15A NCAC 2Q .0508(f)]

8. Starting with emergency generator model year 2011, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the nonresettable hour meter. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if these records are not maintained. [§60.4214(b)]

Reporting [15A NCAC 2Q .0508(f)]

9. No initial notification under §60.7 is required for the emergency use CI engines. [§60.4214(b)]
10. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

M. Natural gas/No. 2 Fuel oil-fired boilers and process heaters subject to CAA § 112(j); Case-by-Case MACT

Emission Source	Source Description
ES-01CMA	No. 2 fuel oil/natural gas-fired boiler with low NOx burners and flue gas recirculation (41 million Btu per hour heat input when firing fuel oil and 42 million Btu per hour heat input when firing natural gas)
ES-02CMA	No. 2 fuel oil/natural gas-fired boiler with low NOx burners and flue gas recirculation (41 million Btu per hour heat input when firing fuel oil and 42 million Btu per hour heat input when firing natural gas)
ES-03CMA	No. 2 fuel oil/natural gas-fired boiler with low NOx burners and flue gas recirculation (41 million Btu per hour heat input when firing fuel oil and 42 million Btu per hour heat input when firing natural gas)
ES-11B	Natural gas/No. 2 fuel oil-fired boiler (25 million Btu per hour heat input capacity)
ES-12B	Natural gas/No. 2 fuel oil-fired boiler (25 million Btu per hour heat input capacity)
ES-24B	Natural gas/No. 2 fuel oil-fired boiler (23.4 million Btu per hour heat input capacity)
ES-25B	Natural gas/No. 2 fuel oil-fired boilers (23.4 million Btu per hour heat input capacity)
ES-26B	Natural gas/No. 2 fuel oil-fired boiler (10 million Btu per hour heat input capacity)
ES-27B	Natural gas-fired boiler (20 million Btu per hour heat input capacity)
ES-28B	Natural gas-fired boiler (20 million Btu per hour heat input capacity each)
ES-29B	One natural gas/No. 2 fuel oil-fired boiler (72.3 million Btu per hour heat input capacity)
ES-30B	Diesel-fired boiler (8.3 million Btu per hour heat input capacity)
ES-31B	Diesel-fired boiler (8.3 million Btu per hour heat input capacity)
ES-32B	Diesel-fired boiler (8.3 million Btu per hour heat input capacity)
ES-34B	Diesel-fired boiler (61.2 million Btu per hour heat input capacity)
ES-35B	Natural gas/No. 2 fuel oil-fired "temporary backup" boiler (up to 72.3 million Btu per hour heat input)
ES-36B	Natural gas/No. 2 fuel oil-fired boiler (10.5 million Btu per hour heat input)
ES-37B	Natural gas/No. 2 fuel oil-fired boiler (10.5 million Btu per hour heat input)
ES-38B	Natural gas-fired boiler (9.64 million Btu per hour heat input)
ES-39B	Natural gas-fired boiler (9.64 million Btu per hour heat input)
ES-40B	Natural gas/No. 2 fuel oil-fired boiler (8.4 million Btu per hour heat input)
ES-41B	Natural gas/No. 2 fuel oil-fired boiler (8.4 million Btu per hour heat input)
ES-42B	Natural gas/No. 2 fuel oil-fired boiler (8.4 million Btu per hour heat input)
ES-43B	Natural gas/No. 2 fuel oil-fired boiler (8.4 million Btu per hour heat input)
ES-44B	No. 2 fuel oil/natural gas-fired boiler with low NOx burners (45.42 million Btu per hour heat input capacity)
ES-45B	No. 2 fuel oil/natural gas-fired boiler with low NOx burners (45.42 million Btu per hour heat input capacity)
ES-46B	No. 2 fuel oil/natural gas-fired boiler with low NOx burners (45.42 million Btu per hour heat input capacity)
ES-TEMPBOIL	Natural gas/No. 2 fuel oil-fired, temporary boiler (up to 100 million Btu per hour heat input)
ES-FORSCOM1	Natural gas/No. 2 fuel oil-fired, boiler (3.0 million Btu per hour heat input)
ES-FORSCOM2	Natural gas/No. 2 fuel oil-fired, boiler (3.0 million Btu per hour heat input)
ES-FORSCOM3	Natural gas/No. 2 fuel oil-fired, boiler (3.0 million Btu per hour heat input)
ES-650B	Natural gas/No. 2 fuel oil-fired boiler (2.09 million Btu per hour heat input)
ES-779B	Natural gas/No. 2 fuel oil-fired boiler (2.0 million Btu per hour heat input)
ES-814B	Natural gas/No. 2 fuel oil-fired boiler (1.8 million Btu per hour heat input)
ES-819B	Natural gas/No. 2 fuel oil-fired boiler (2.0 million Btu per hour heat input)
ES-820B	Natural gas/No. 2 fuel oil-fired boiler (2.0 million Btu per hour heat input)
ES-825B	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)
ES-825B	Natural gas-fired hot water heater (3.0 million Btu per hour heat input, 400 gallons)
ES-908B	Natural gas-fired boiler (4.2 million Btu per hour heat input)
ES-909B	Natural gas-fired boiler (3.2 million Btu per hour heat input)

Emission Source	Source Description
ES-910B	Natural gas-fired boiler (2.7 million Btu per hour heat input)

1. 15A NCAC 2D .1109: CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters

The Permittee shall use best combustion practices when operating the affected boilers and process heaters. The permittee shall comply with this CAA §112(j) standard until May 22, 2019. The initial compliance date for the applicable CAA §112(d) standard for ''National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" is May 23, 2019.

a. These conditions need not be included on the annual compliance certification until after the initial compliance date.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

b. To assure compliance, the Permittee shall perform annual inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
   i. Inspect the burner, and clean or replace any components of the burner as necessary;
   ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
   iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

   The Permittee shall conduct at least one annual inspection and maintenance per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers and process heaters are not inspected and maintained as required above.

c. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
   i. The date of each recorded action;
   ii. The results of each inspection; and,
   iii. The results of any maintenance performed on the boilers.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

No reporting is required for hazardous air pollutants from these sources.

N. New boilers (natural gas-fired or distillate fuel oil-fired, less than 5 million Btu per hour heat input each) subject to MACT DDDDD

Table 2.2.N

Emission Source	Source Description
ES-601B	Natural gas-fired boiler (2.0 million Btu per hour heat input)
ES-602B	Natural gas-fired boiler (2.0 million Btu per hour heat input)
ES-833B	Natural gas-fired boiler (1.8 million Btu per hour heat input)
ES-834B	Natural gas-fired boiler (1.8 million Btu per hour heat input)
ES-835B	Natural gas-fired boiler (1.8 million Btu per hour heat input)
ES-842B	Natural gas-fired boiler (2.34 million Btu per hour heat input)
ES-851B	Natural gas-fired boiler (3.13 million Btu per hour heat input)
ES-873B	Natural gas-fired boiler (2.0 million Btu per hour heat input)
ES-874B	Natural gas-fired boiler (2.0 million Btu per hour heat input)
ES-886B	Natural gas-fired boiler (1.8 million Btu per hour heat input)
ES-887B	Natural gas-fired boiler (1.8 million Btu per hour heat input)
ES-890B	Natural gas-fired boiler (2.10 million Btu per hour heat input)
ES-892B	Natural gas-fired boiler (1.8 million Btu per hour heat input)
ES-894B	Natural gas-fired boiler (1.66 million Btu per hour heat input)
ES-895B	Natural gas-fired boiler (1.66 million Btu per hour heat input)

Emission Source	Source Description
ES-902B	Natural gas-fired boiler (2.0 million Btu per hour heat input)
ES-903B	Natural gas-fired boiler (2.0 million Btu per hour heat input)

1. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY, Subpart DDDDD

a. For these sources, the Permittee shall comply upon startup with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 2D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters".

Work Practice Standards [40 CFR 63.7500(a) and (b), 63.7515(e), and 63.7540(a)(12), and Table 3]

b. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 40 CFR §63.7540(a)(12).

Boilers and process heaters with a heat input capacity of less than or equal to 5 million Btu per hour in the units designed to burn gas 2 (other) fuels subcategory or units designed to burn light liquid fuels subcategory must complete a tune-up every 5 years as specified in 40 CFR §63.7540.

Recordkeeping Requirements [40 CFR 63.7555(a) and 63.7560(a-c)]

c. The Permittee must keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

d. Records must be kept in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). The Permittee must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records must be kept (written or electronic format) on-site for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records off site for the remaining three years.

e. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the records are not maintained.

Notification and Reporting Requirements [40 CFR 63.7530(a) and (e), 63.7545 and 40 CFR 63.7550 (a-c) and (f), and Table 9]

f. The Permittee must submit a signed statement in the Notification of Compliance Status report that indicates that a tune-up of the unit was conducted.

g. The Permittee must include with the Notification of Compliance Status a signed certification that the tune up was completed according to Table 3 to this subpart and is an accurate depiction of the facility.

h. In accordance with 40 CFR §63.9(i) the Permittee has requested an alternate submittal deadline for initial notifications and notice of compliance status (NOCs) for the boilers listed in Table 2.1.N. above as required in 40 CFR §63.9(b)(v) and §63.9(h)(2)(ii). The alternate submittal date of initial notifications and NOCs for these boilers is semiannually along with the semiannual compliance report.

Each of these reports shall postmarked on or before January 30 of each calendar year for the preceding six-month period from July to December and July 30 of each calendar year for the preceding six-month period from January to June.

The Permittee shall submit a semiannual compliance report postmarked on or before January 30 of each calendar year for the preceding six-month period from July to December and July 30 of each calendar year for the preceding six-month period from January to June. The report shall contain the following information:

i. Company name and address.
ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
iii. Date of report and beginning and ending dates of the reporting period.
iv. The date of the most recent tune-up (include the date of the most recent burner inspection if it

was not done every five years and was delayed until the next scheduled unit shutdown).

v. If there are no deviations from the requirements for work practice standards in paragraphs b. and c. above, a statement that there were no deviations from work practice standards during the reporting period; and

vi. If you have a deviation from a work practice standard during the reporting period, the report must contain the following information:

A. the total operating time of each affected source during the reporting period,

B. a description of the deviation and which emission limit or operating limit from which you deviated, and

C. information on the number, duration, and cause of deviations (including known cause), as applicable, and the corrective action taken.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these reporting requirements are not met.

O. Welding Operations:

- ES-27W (Building A-3319)
- ES-28W (Building M-8311)

The following provides a summary of limits and/or standards for the emission sources described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants - non specific Chromium VI - manganese - Nickel metal	Toxics evaluation	G.S. 143-215.107

SECTION 3 - GENERAL CONDITIONS (v4.0)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
    a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
        i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
            - name and location of the facility;
            - nature and cause of the malfunction or breakdown;
            - time when the malfunction or breakdown is first observed;
            - expected duration; and
            - estimated rate of emissions;
        ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
        iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
    a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include

noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a

compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –** FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.

iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:

a. a description of the change at the facility;
b. the date on which the change will occur;
c. any change in emissions; and
d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound